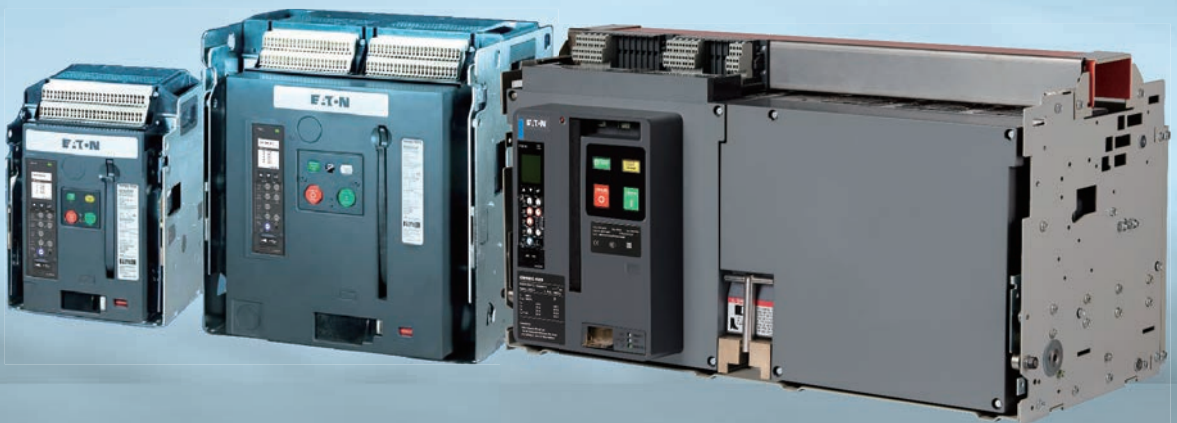


New Generation Air Circuit Breaker IZM

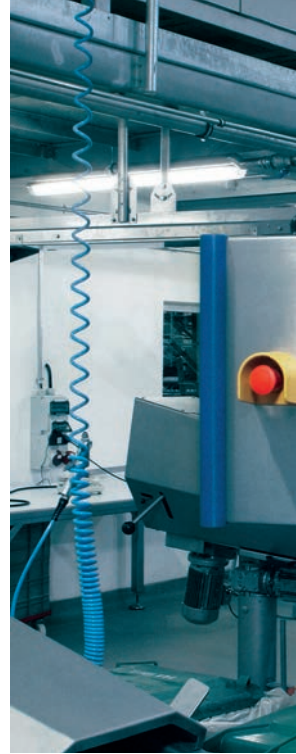
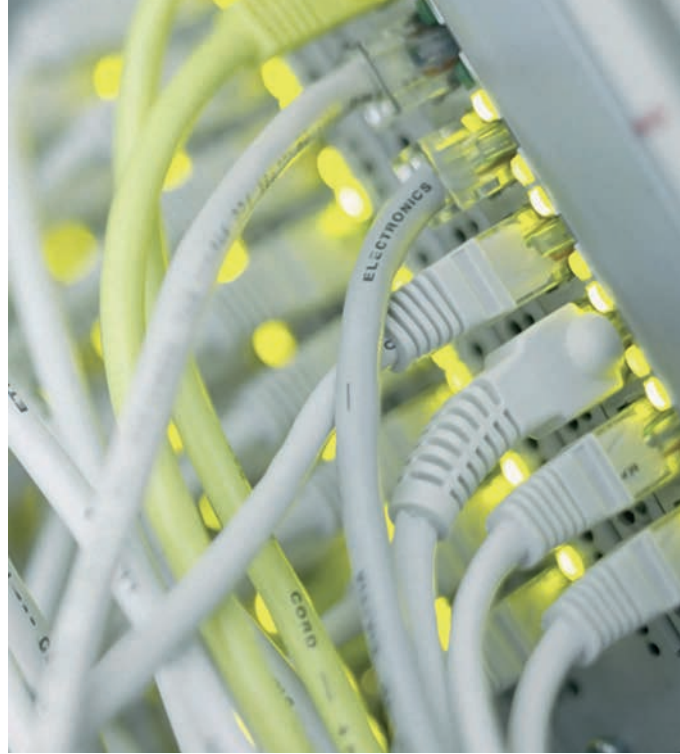
Superior Solutions

To Meet and Exceed The Unique and
Wide-ranging Requirements



EATON
Powering Business Worldwide

MOELLER 
An Eaton Brand



Powering electrical systems worldwide

Buildings

- Residential
- Healthcare
- Education
- Commercial offices
- Retail
- Public sector
- Airports

- Electrical distribution solutions for safe and efficient power delivery
- Power quality systems for uptime and reliability
- Power metering and monitoring to add intelligence and save costs
- Industrial control products for HVAC applications

Information Technology

- Data centers
- Telecommunication
- Networks
- Computer rooms

- World's most efficient line of UPSs to reduce footprint and save energy
- Reliable power systems with inherent redundancy to improve availability
- Power metering and monitoring to diagnose problems and lower costs
- Local service and support for quick response



Public and private sectors

Buildings, Information Technology, Industrial & Machinery, Energy & Utilities
We provide reliable, efficient and safe power management.

Industrial & Machinery

- Machine building:
 - Food and packaging machines
 - Woodworking and processing machines
- Agriculture
- Construction
- Mining and metals
- Paper industry
- Chemical and pharmaceutical industry
- Automotive industry
- Logistics centers

- Electrical distribution equipment to deliver power throughout the enterprise
- Control & automation and power quality equipment for process control
- Power metering and monitoring to manage energy costs and uptime
- Power and motion control products to optimize productivity, reliability, safety and operator comfort

Energy & Utilities

- Renewable energy:
 - Solar
 - Wind
 - Hydropower
- Traditional energy:
 - Oil
 - Gas
- Smart grid
- Water and waste water

- Electrical balance of system and turnkey services for residential, utility and commercial solar installations
- Power distribution equipment, control components and system installations services
- Network power grid technology for intelligent data, lower costs and crew / public safety

Versatile circuit breakers up to 6300 A – for cost-effective, optimized solutions.

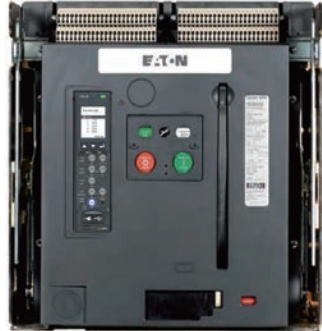


The IZMX16 of the NRX series is the smallest air circuit-breaker (ACB) worldwide:

With a volume of only 0.024 m³ and a front surface of only 0.092 m², it is just slightly bigger than the size of a A4 sheet of paper! And all this without any loss in terms of performance.

The innovative concept allows the user to install two circuit breakers side by side in withdrawable design, in a 600 mm wide section. This fact provides for a more cost-effective setup of the section and, in addition, it helps to save operating space. And where remote switching is required, this volume can even accommodate a motor for charging the stored-energy spring mechanism and releases for electrical operation.

High performance combined with reduced space is exceptional value to customer.



The IZMX40 of the NRX series is a circuit breaker for up to 4000 A with depth less than 400mm for the drawout version, without the need to install any additional "copper mines" in the connection area.

Tests to integrate it into Eaton switch-gear systems, such as Modan, xEnergy, Power Xpert and Capitol 40 confirm its outstanding technical data and optimal compatibility thanks to the flexible connection system.

The modular structure, integrated solutions as well as a complete range of accessories and additional functions make it easy to adapt the circuit breaker to any of the required applications. Optionally it can be configured right at the factory – without any extra cost for additional installation work at the circuit breaker.



An IZM99 circuit breaker can be produced in a simplified manner by assembling 2 circuit breakers together. Therefore, IZM99 breakers are equipped with 2 wiring terminals for each phase on the incoming and outgoing sides.

This can facilitate heat dissipation of power distribution cabinets and simplify production in some distribution cabinets, and reduce the number of different bus adapter models.

- Phase sequence of IZM99: (NN) AABCC
- 6300A IZM99 circuit breaker: horizontal wiring is supplied as standard, thus simplifying the bus-bar connection in the switchgear system



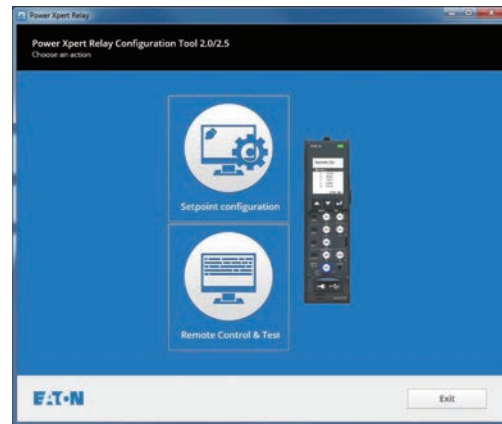
Horizontal Terminal



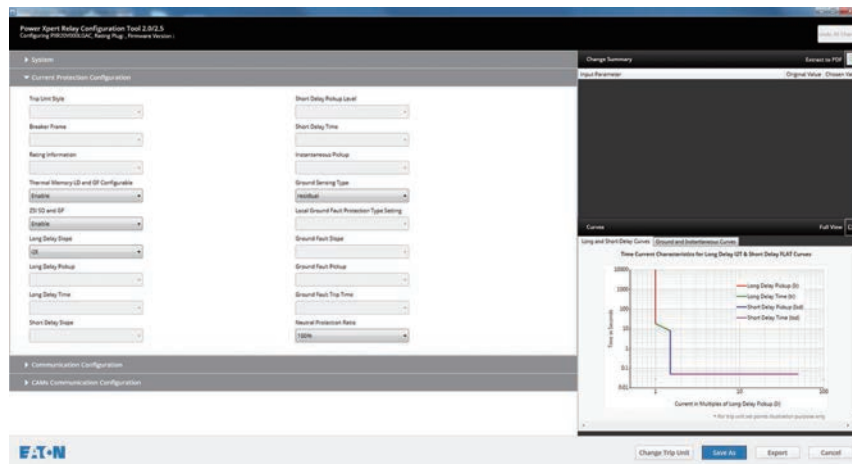
Vertical Terminal
(Available on B, N and H type.
E type can be configured as horizontal terminal only)

The next generation trip unit platform: Power Xpert Release (PXR)

- LCD display with multilingual capability
- Current metering on PXR20 and power metering on PXR25
- Extended range for pickup value and delay timing setting
- "OFF" setting available for ground fault(G) and non-delayed instantaneous trip(I)
- Onboard Modbus communication (standard on PXR25 and optional on PXR20)
- MicroUSB for computer connection
- PXR Configuration and Test Tool to remotely configure and test the trip unit
 - Trip test
 - Waveform capture
 - Diagnostics
 - Long trip curve setting
 - ZSI/Thermal Memory on/off



PXR Trip Unit



Arcflash Reduction Maintenance System™

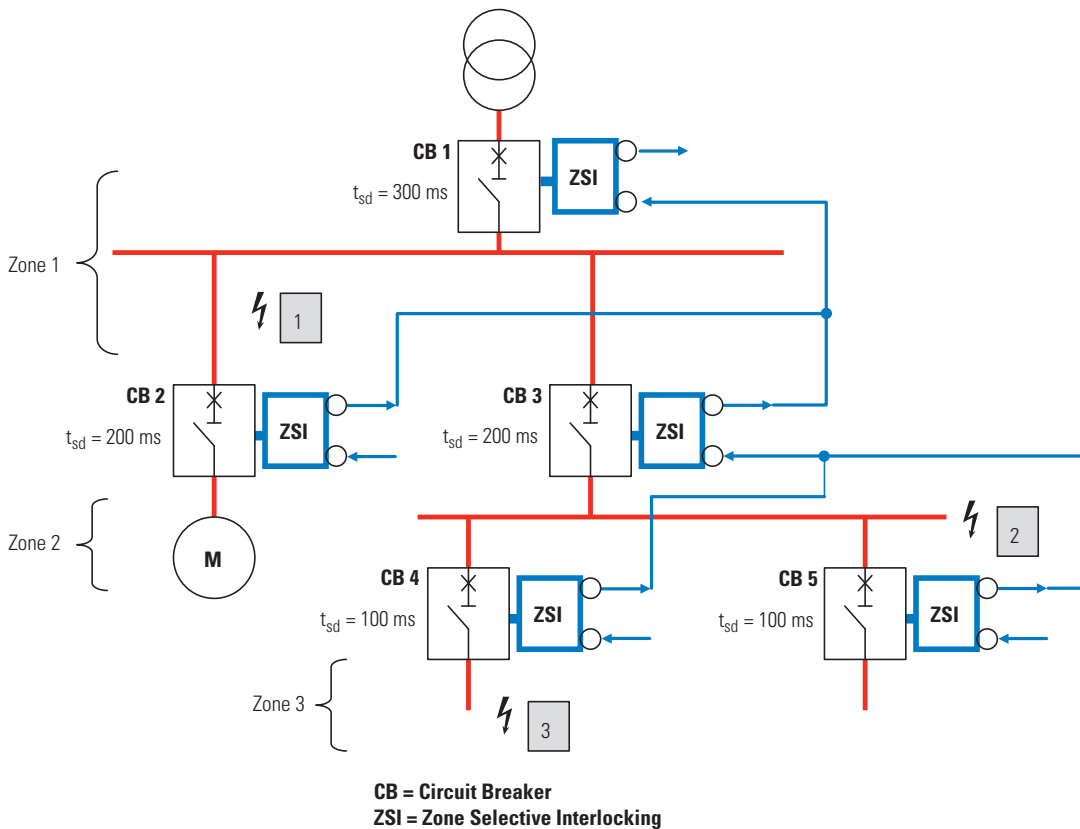
Eaton's patented Arcflash Reduction Maintenance System technology provides maintenance staff improved safety of downstream maintenance locations using a simple and reliable method to reduce fault clearing times and energy in an arc flash event (radiation, sound, pressure, temperature).

Arcflash Reduction Maintenance System uses a separate analog trip circuit providing faster signal processing and interruption times than the standard (digital) "instantaneous" protection.

The Arcflash Reduction Maintenance System function is activated either directly on the circuit breaker through a local switch or remotely through communications or a contact input.

Arcflash Reduction Maintenance System is optional on both PXR20 and PXR25 trip units.

IZM Series Air Circuit Breakers



Zone Selective Interlocking

- Zone Selective Interlocking (ZSI) is described in the soon to be published standard IEC 61912-2 Low voltage switchgear and controlgear.
- The term zone selective interlocking is used to describe a method of controlling circuit breakers to provide selectivity with very short interruption times for the breaker closest to the fault.
- There are different levels (zones) of protection that isolate the fault in the distribution system.
- ZSI may be applied for faults between phases or earth-faults or both.
- ZSI is applied to the short time faults where time selectivity can be achieved with the breakers between the zones.
- Because ZSI does not require auxiliary power or additional modules to operate set up time is minimal and application is easy.

Zone Selective Interlocking Example

Example A – Short-circuit at position 3

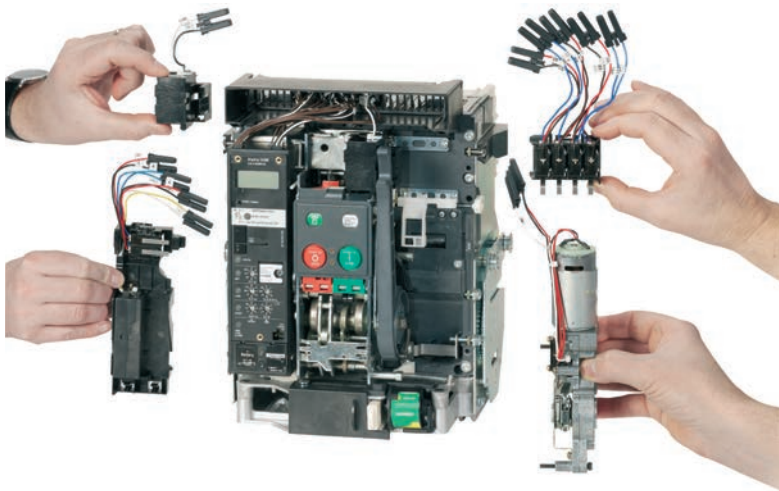
- Circuit-breakers CB1, CB3, CB4 all see the short circuit current and register a short delay pick-up.
- Circuit breaker CB4 sends a ZSI out-put blocking signal to CB3 ZSI input. CB3 sends a ZSI output blocking signal to CB1 ZSI input. CB1 sends a ZSI output signal that is not wired. This signal could be wired to a MV relay on the other side of the transformer with a compatible ZSI circuitry.
- CB1 registers the ZSI input signal and starts its timer for 300ms. CB3 registers the ZSI input signal and starts its timer for 200ms. CB4 gets no input from any lower zone circuit breaker. This breaker will then trip immediately without any time delay. CB4 interrupts the fault and CB1 and CB3 stop short delay timing because the fault current is gone.
- If for some reason CB4 does not open and interrupt the fault then at the end of its short delay time CB3 will open and interrupt the fault.

Example B – Short-circuit at position 2

- Circuit-breakers CB1, CB3, see the short circuit current and register a short delay pick-up. CB4 and CB5 do not see the fault current and do not send a ZSI output.
- Circuit breaker CB3 sends a ZSI out-put blocking signal to CB1 ZSI input. CB1 sends a ZSI output signal. In this example that signal is not wired.
- CB1 registers the ZSI input signal and starts a timer for 300ms. CB3 gets no input from any lower zone circuit breaker. This breaker will then trip immediately without any time delay. CB3 interrupts the fault and CB1 stops short delay timing because the fault current is gone. The clearance time is reduced by approximately 150ms.

Example C – Short-circuit at position 1

- Only Circuit breaker CB1 sees the short circuit current and registers a short delay pick-up. CB2, CB3, CB4 and CB5 do not see the fault current and do not send ZSI outputs.
- CB1 sends a ZSI output signal. In this example that signal is not wired.
- CB1 gets no input from any lower zone circuit breaker. This breaker will then trip immediately without any time delay. CB1 interrupts the fault and the clearance time is reduced by approximately 250ms.



Breaker rear side (withdrawable breaker)

Space-saving circuit-breakers with useful accessories

Eaton Introduces IZM Series

The new IZMX Series from Eaton is a new series of air circuit-breakers with an extensive range of accessories. The new range provides users with two compact frame sizes up to 4000A, modular design, common accessories, easy to integrate communications and a full range of trip units including the new powerful Power Xpert Release(PXR) trip unit with a LCD display. The innovative concept of the **IZMX16** makes it possible to install two withdrawable circuitbreakers in a 600 mm wide section. This enables more economical section design and also saves operating space. The compact modular design of the **IZMX40** offers customers a full range of high performance ratings in a single frame size simplifying the integration process into panel boards and switch boards. **IZMX Series**, a new generation and new standard in circuit protection.

Eaton's IZM99, circuit-breakers offer a proven and complete range of air circuit-breakers up to 6300 A. Four sizes enable the ideal circuit-breaker to be selected economically for any project. In this way, only the module width increases with the required rated operational current, enabling the most compact and economical size to be selected.

Applications

The circuit breakers can be used in four main application areas depending on the type of equipment to be protected:

- System protection
- Motor protection
- Transformer protection
- Generator protection

These key applications make different demands on the switches, which are met with a range of control units.

Switches with closing release

They are particularly suitable for synchronization tasks.

Coupler switches

In addition to the circuit-breakers, switch-disconnectors are also available. These are used, for example, as coupler switches between different power supplies. The switch-disconnectors are used as coupler switches for different sections of a network in conjunction with our automatic network switching device.

Modular Design, Common Accessories

The retrofitting of accessories is made considerably easy thanks to the efficient "plug & work" technology. Accessory drawers and snap-fit mechanisms make it possible to fit the latest accessories with virtually no tools. This flexibility allows you to respond easily to changing requirements within your system. Most accessories for IZMX Series are common to both the compact and standard frame sizes.

Standard scope of delivery

- With the new IZM Series range, you select a basic device that is already fitted with an electronic release.
- The standard mounting for both frames is on a horizontal mounting plate or on horizontal traverses in the switching cabinet. The IZMX16 can also be fastened to vertical mounting plates.
- With four-pole devices, the neutral conductor is arranged on the left (front view).
- The neutral conductor can be loaded 100% like the phase conductors.
- The circuit-breakers are provided with a standard mechanical reclosing lockout. After an overload trip, the fault is usually examined first. After the fault is identified and rectified, the mechanical reclosing lock-out is reset by pressing the red mechanical trip indicator on the front of the circuit-breaker.
- A "remote-reset" feature and an "automatic reset" are offered as additional ordering options. The remote reset enables resetting the

breaker after an over current trip via a control voltage. The automatic reset option enables the circuit breaker to be restored to normal operation immediately after an over current trip (i.e. there is no mechanical reclosing lockout). In these applications compulsory fault analysis is intentionally avoided.

- The number of secondary control cable terminals depends on the accessories fitted.
- If a cassette is ordered without the basic device, this can be already fitted with the maximum number of control cable terminals. For greater economy in large plants, the cassette is also offered without control circuit terminals so that fitting can be carried out later at the installation or when accessories are required at a later time.
- The withdrawable basic device includes the primary finger clusters and levering-in mechanism. NOTE: Some manufacturers mount the primary finger clusters inside the cassette cell, which requiring shutdown of the panel board for inspection and maintenance.
- 2 changeover contacts are provided as standard for ON/OFF status indication.
- A coding mechanism between the basic device and the cassette prevents impermissible combinations ("Rejection Interlock").
- The door escutcheon is always included in the scope of delivery. With withdrawable designs this is supplied with the cassette (withdrawable unit).
- On withdrawable units the circuit breaker can be pulled out to inspect the arc chutes. With fixed units, it is recommended that sufficient space is provided above the circuit breaker to enable inspection. An additional cover is not required.
- If a motor operator is ordered, the "Spring-operated stored energy mechanism tensioned" indicator switch is automatically provided.

Additional benefits IZM Series

- Thanks to the separate mounting position, a switching operations counter can now be used also independently of a motor operator.
- Withdrawable unit operation: The unit is actuated with a hand crank supplied as a standard feature and has a secure position in the basic device.
- IZM99 breakers are equipped with 2 wiring terminals for each phase on the incoming and outgoing sides. This can facilitate heat dissipation of power distribution cabinets and simplify production in some distribution cabinets, and reduce the number of different bus adapter models.
- Phase sequence of IZM99: (NN) AABCC.
- 6300A IZM99 circuit breaker: horizontal wiring is supplied as standard, thus simplifying the busbar connection in the switchgear system.

External 24 V supply

- The standard protection functions of IZMX Series operate independently of an external control voltage supply. The power supply of the electronics unit, for example for overload and short-circuit protection, is implemented via the current transformers integrated in the circuit-breaker.
- The universal and power measurement release units with display can be fed with a 24 V DC supply so that the display function can be used without a load. An external 24 V DC power supply is needed if communication functions are required.

IZM Series Air Circuit Breakers

Greater safety for maintenance personnel with ARMS™

Personnel safety is of paramount importance in today's work environment. Of recent concern is the potential for serious injury due to exposure to electrical arcs. Eaton's IZMX Series trip units offer the patented ARMS system (Arcflash Reduction Maintenance System™), which offers a non-delayed immediate disconnection in the event of an arc fault. This disconnection is even faster than that of a non-delayed short-circuit release. This function can be activated directly on the circuit-breaker or via an external switch, such as when maintenance personnel enter a hazardous area.

Major Benefits of ARMS:

- Increased personnel safety – by limiting the available arc flash energy
- Simple to operate
- Enabled with circuit breaker door closed by a door mounted lockable switch
- Enabled only for the time required to perform the desired maintenance work
- Preserves overcurrent coordination under normal conditions
- Reduction in incident energy levels may permit reduced levels of Personal Protective Equipment (PPE), therefore improving worker comfort and mobility

Other components of the ARCON arc fault protection system, in conjunction with Series NRX, enable an expansion of arc fault protection in stages. ARCON on the Internet: www.moeller.net/arcon

Selection criteria for circuit-breakers

Fundamental criteria for the selection of circuit-breakers:

- Max short-circuit current I_k max at the circuit-breaker' point of installation: this value determines the short-circuit breaking capacity or the short-circuit current carrying capacity of the circuit-breaker. It is compared with the I_{cu} , I_{cs} and I_{cw} values of the switch and essentially determines its size (see technical data).
- Rated operational current I_n which should flow through the respective branch circuit: This value must not be greater than the maximum switch rated operational current of the circuit-breaker. The rated operational current can be adjusted down using additional rated operational current modules.
- Ambient temperature of the circuit breaker: This is generally the internal temperature in the control panel. Observe the derating values with increased ambient temperature (see Technical data).
- Circuit-breaker type: fixed mounted or withdrawable units, 3 or 4 pole.
- Minimum short-circuit current, which flows through the switching device: The release must recognize this value as a short-circuit and may react with a trip.
- Protection functions of the circuit breaker: This is determined by the selection of the respective overcurrent release.

For additional resources and tools for selecting Eaton Air Circuit Breakers please visit us as www.eaton.com/seriesnrx.

Communication Options for IZM Series

With the respective communication module - PCAM, MCAM or ECAM (Profibus-DP / Modbus/ Ethernet Communications Adapter Module) - every circuit breaker of the NRX series is equipped for modern communication and is fit for the future. The databus not only allows to transmit information, but also to receive commands/settings.

Onboard Modbus communication is standard on the PXR25 (U type) trip unit and optional on the PXR20(V type) trip unit upon order. Additional PCAM, MCAM or ECAM module can be installed externally for PXR25 to expand the communication capability. (No more than one external CAM module can be installed)

PROFIBUS-DP configuration

Communications module IZMX-PCAM has a 9-pin D-Sub socket for connection to PROFIBUS. The module works as a slave on PROFIBUS-DP; the data is defined through a standardized device master data file, which permits smooth integration of IZMX in a DP line.

- On the PROFIBUS-DP side the module supports automatic baud rate detection; the PROFIBUS-DP bus address is set through the trip unit's display. The maximum cable length is 2.4 km.
- To operate the IZMX-PCAM, a supply voltage of 24 V DC is required.
- The data connection to the circuit-breaker is implemented internally through a serial highspeed data connection.

Data access via PROFIBUS-DP

The data on PROFIBUS-DP are offered according to the profile for low-voltage switchgear (LVSG) of PROFIBUS International (PROFIBUS and PROFINET User Group). Five different data structures with varying numbers of parameters are available through the device master data file. This allows a data filter to be easily implemented, which simplifies integration of the Series NRX data into the control system.

Modbus configuration

Communications module IZMX-MCAM has a plug-in screw terminal for connection to Modbus. The module operates as a Modbus slave.

- Baud rate, data format and address (max. 247) for Modbus are set with the input keys of the trip unit. The maximum cable length is 1.2 km.
- The Modbus must be terminated with a 120 Ω terminating resistor.
- To operate the IZMX-MCAM, a supply voltage of 24 V DC is required.
- The data connection to the circuit-breaker is implemented internally through a serial highspeed data connection.

Data access via Modbus

The data is contained in comprehensive data tables. Each data point is available as floating-point (IEEE) or fixed-point value. This variance allows the integration of the IZMX to be adapted to the Modbus architecture. This enables a simple means of implementing a data filter, which facilitates the integration of IZMX data in the control system.

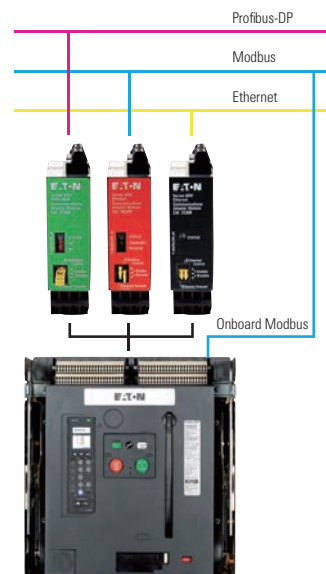
Ethernet configuration

has standard RJ45 socket for connection to Ethernet. This module has a configured web server on board and supports Simple Network Mail Protocol (SNMP) for alarm or event notifications.

- IP address and related parameters are set through the trip unit's display.
- The data connection to the circuit-breaker is implemented internally through a serial high speed data connection.
- To operate the IZMX-ECAM, a supply voltage of 24 V DC is required.

Data access via Ethernet

The data is contained in different web pages structured according to the topics „Data View“ „Alarms“ „Logs“ and „Configuration“ . This variance allows the integration of the IZMX to be adapted to all Ethernet networks supporting http protocol. An „around the world access“ to the breaker becomes reality and using the SNMP protocol alarm messages can be transported everywhere.



IZMX Circuit Breakers, INX Switch-disconnectors



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New Generation Air Circuit Breaker IZM99

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Technical Data



IZMX16



IZMX40

General								
Standards		IEC/EN 60947			IEC/EN 60947			
Ambient temperature	Storage	°C	-25 - 85			-25 - 85		
	Operating (open)	°C	-25 - 85			-25 - 85		
Mounting position								
Utilization category		B			B			
Protection type		IP20, IP31 with door sealing frame						
Direction of incoming supply		as required			as required			
Switching capacity								
Rated Current (I _n)		630A, 800A, 1000A, 1250A, 1600A			800A, 1000A, 1250A, 1600A, 2000A, 2500A, 3200A, 4000A			
Type of circuit breaker		B	N	H	B	N	H	
Rated impulse withstand voltage (U _{imp} , VAC)		12000	12000	12000	12000	12000	12000	
Rated insulation voltage (U _i , VAC)		1000	1000	1000	1000	1000	1000	
Rated operational voltage (U _e , VAC)		690	690	690	690	690	690	
Ultimate breaking capacity (I _{cu} , kA)	240V 50/60Hz	42	85	85	66	85	105	
	440/480V 50/60Hz	42	50	66	66	85	105	
	690V 50/60Hz	42	42	42	66	75	75	
Rated service breaking capacity (I _{cs} , kA)	240V 50/60Hz	42	50	65	66	85	105	
	440/480V 50/60Hz	42	50	50	66	85	105	
	690V 50/60Hz	42	42	42	66	75	75	
Rated short-time withstand current (I _{cw} , kA)	1s/3s	42/-	42/-	42/-	66/53	85 ¹⁾ /66	85 ¹⁾ /66	
Rated short-circuit making capacity (I _{cm} , kA)	440/480V 50/60Hz	88	105	145	145	187	231	
	690V 50/60Hz	88	88	88	145	165	165	
Operating delays (ms)	Closing delay	25			30			
	Closing delay electrical (via SR)	30			35			
	Opening delay electrical (via ST)	25			22			
	Opening delay electrical (via UVR)	50			37			
Maximum operating frequency (Operations/h)		60			60			
Durability and installation characteristics								
Lifespan		630A-1600A		800A-1600A		2000A	2500A-4000A	
	Mechanical, w/o maintenance	12500		12500		10000	10000	
	Mechanical, w/ maintenance	25000		25000		20000	20000	
	Electrical, w/o maintenance	10000		10000		8000 ²⁾	6000 ³⁾	
Dimensions (H × W × D, mm)	Fixed 3P	338 × 210 × 184			398 × 376 × 298			
	Fixed 4P	338 × 279 × 184			398 × 492 × 298			
	Withdrawable 3P	360 × 254 × 289			456 × 426 × 393			
	Withdrawable 4P	360 × 324 × 289			456 × 541 × 393			
Weight (kg)	Fixed 3P/4P	15/20			45/56			
	Withdrawable 3P/4P	39/47			98/121			

¹⁾ 75kA at 690VAC

²⁾ 6000 operations for B,N and H type at 690VAC, E type at 480VAC

³⁾ 2500 operations at 690VAC

IZMX Series Air Circuit Breakers

Technical Data



V Type (PXR20)
IZMX-PXRV
IZMX16/40...V...



U Type (PXR25)
IZMX-PXRU
IZMX16/40...U...

Protective options	LSI; LSIG/LSIA (Optional)	LSI; LSIG/LSIA (Optional)
Overload protection (L)		
Overload trip (I_r), $\times I_n$	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 0.95, 0.98, 1.0	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 0.95, 0.98, 1.0
Long delay time t_r ($6 \times I_r$)	0.5, 1, 2, 4, 7, 10, 12, 15, 20, 24 s	0.5, 1, 2, 4, 7, 10, 12, 15, 20, 24 s
Short-time delayed short-circuit protection (S)		
Short delayed pickup (I_{sd}), $\times I_r$	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 10	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 10
Short delay time, flat characteristic curve (t_{sd})	0.0, 0.1, 0.2, 0.3, 0.4, 0.5 s ¹⁾	0.0, 0.1, 0.2, 0.3, 0.4, 0.5 s ¹⁾
Short delay time at $8 \times I_r$, I^2t curve (t_{sd})	0.1, 0.3, 0.4, 0.5 s	0.1, 0.3, 0.4, 0.5 s
Non-delayed short-circuit protection (I)		
Non-delayed pickup (I_i), $\times I_n$	OFF, 2, 4, 5, 6, 7, 8, 10, 12, 15	OFF, 2, 4, 5, 6, 7, 8, 10, 12, 15
Optional ground fault protection (G)		
Ground/Earth fault alarm (A), $\times I_n$	0.2, 0.4, 0.6, 1.0	0.2, 0.4, 0.6, 1.0
Ground/Earth pickup (I_g), $\times I_n$	OFF, 0.2, 0.4, 0.6, 0.8, 1.0	OFF, 0.2, 0.4, 0.6, 0.8, 1.0
Short delay time, flat characteristic curve (t_g)	0.1, 0.2, 0.3, 0.4, 0.5 s	0.1, 0.2, 0.3, 0.4, 0.5 s
Short delay time at $0.625 \times I_n$, I^2t curve (t_g)	0.1, 0.2, 0.3, 0.4, 0.5 s	0.1, 0.2, 0.3, 0.4, 0.5 s
Over-temperature trip	●	●
Thermal memory	●	●
Zone selectivity ZSI	●	●
Making current release (MCR)	●	●
Protective functions		
System diagnostic		
Status/Overload LED	●	●
Cause of trip LEDs	●	●
Current at trip point (display indication)	●	●
High load or ground fault alarm contact	●	●
System monitor		
LCD display	● ²⁾	● ²⁾
Current metering accuracy	$\pm 1\%$ of Reading	$\pm 1\%$ of Reading
Voltage (%) L to L	–	$\pm 1\%$ of Reading ³⁾
Power and energy (%)	–	$\pm 2\%$ of Reading ³⁾
Apparent power kVA and demand	–	● ³⁾
Reactive power kVAR	–	● ³⁾
Power factor	–	● ³⁾
Communications		
Onboard (ModBus)	○	●
External (CAM Module)	○	○
Power supply requirement	+24 V DC, optional	+24 V DC, optional
Additional functions		
Test Capability	Integral	Integral
Maintenance Mode ARMS (Arc Flash Reduction Maintenance System™)	○	○
Trip log	●	●
Electronic operations counter	●	●
Waveform capture	●	●
Breaker health monitor	●	●

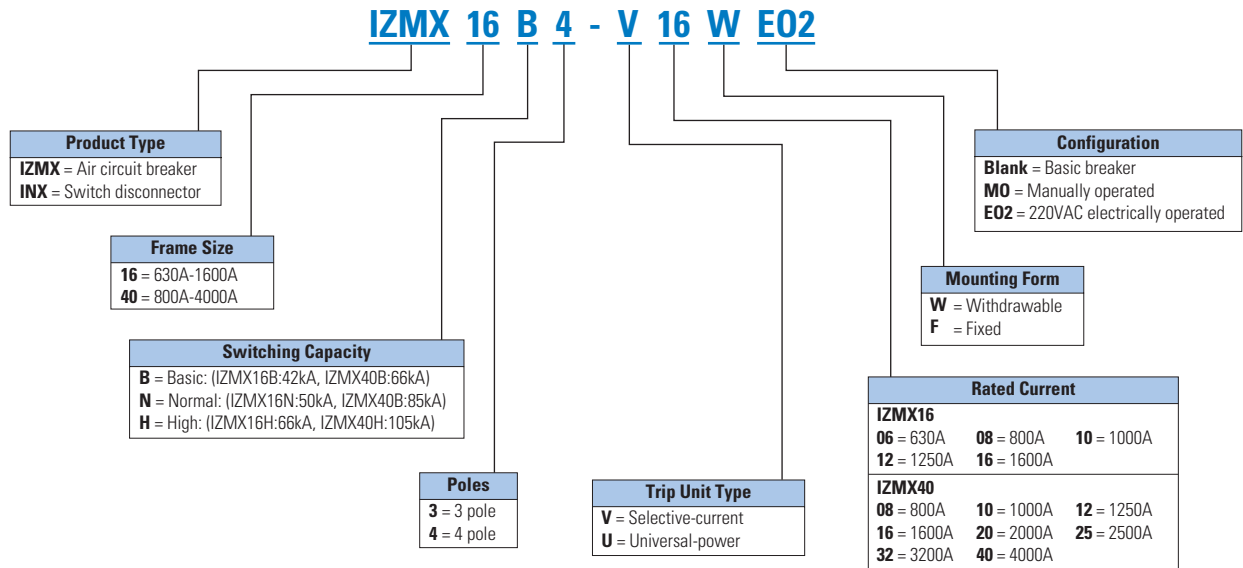
Notes ¹⁾ 0.1s: trip time is 0.06s to 0.1s; 0s: nominal clear time is 60ms with auxiliary power and 120ms without.

²⁾ Requires external 24VDC control voltage supply when continuous current below 20% of I_n

³⁾ Requires external PT module (IZMX-PXR-PTM-2) for voltage sensing input to trip unit

● Standard ○ Optional – not available

IZMX Series Air Circuit Breakers Catalog Number



Recommended Selection Examples

IZMX40 fixed 220VAC electrically operated example (item 1-2 for manually operated MO):

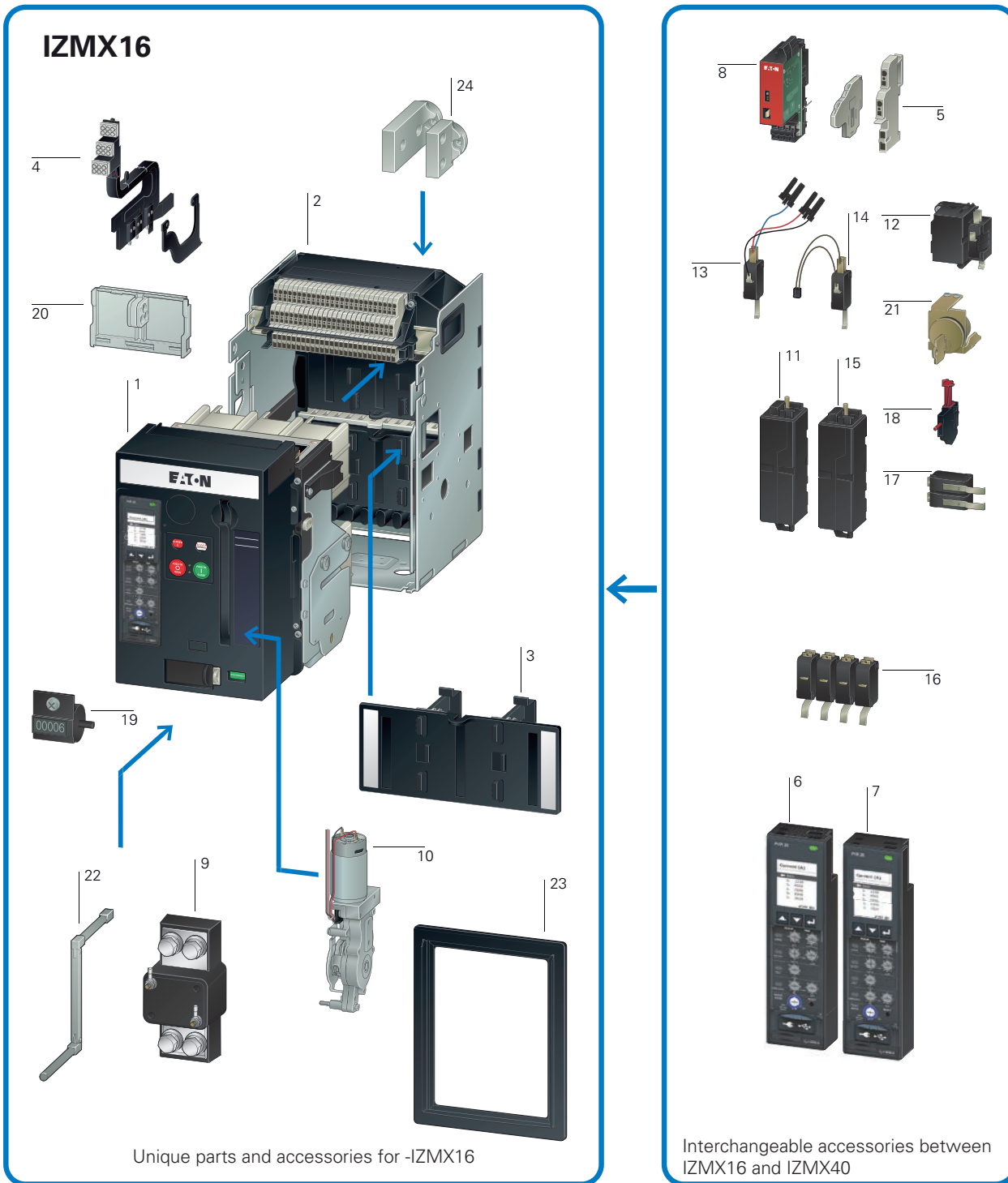
- | | |
|----------------------|---|
| ① IZMX40B3-V16F | Fixed parent breaker, including 2a2b Aux contact |
| ② IZMX-THV403-3200-2 | Main terminal adapter – horizontal (3200A and below) |
| ③ +IZMX-M40-230AD | 208-250 VAC/DC Charging motor |
| ④ +IZMX-ST230AD | 220-240 VAC/DC Shunt trip |
| ⑤ +IZMX-SR230AD | 220-240 VAC/DC Closing spring release |
| ⑥ +IZMX-AS22 | Additional 2a2b Aux contact (4a4b total) |
| ⑦ +IZMX-OTS | Over current trip switch(OTS) 2CO |
| ⑧ EASY400-POW-CN | External power module to converter 220VAC to 24VDC to power trip unit |

IZMX40 withdrawable 220VAC electrically operated E02 example (item 1-4 for manually operated MO):

- | | |
|----------------------|---|
| ① IZMX40B3-U16W | Withdrawable parent breaker, including 2a2b Aux contact |
| ② +IZMX-CAS403-2000 | Cassette(2000A and below) |
| ③ +IZMX-SH403 | Safety shutters |
| ④ IZMX-THV403-3200-2 | Main terminal adapter – horizontal (3200A and below) |
| ⑤ +IZMX-M40-230AD | 208-250 VAC/DC Charging motor |
| ⑥ +IZMX-ST230AD | 220-240 VAC/DC Shunt trip |
| ⑦ +IZMX-SR230AD | 220-240 VAC/DC Closing spring release |
| ⑧ +IZMX-AS22 | Additional 2a2b Aux contact (4a4b total) |
| ⑨ +IZMX-OTS | Over current trip switch(OTS) 2CO |
| ⑩ EASY400-POW-CN | External power module to converter 220VAC to 24VDC to power trip unit |

IZMX Series Air Circuit Breakers

IZMX system overview



Unique parts and accessories for -IZMX16

Interchangeable accessories between IZMX16 and IZMX40

1 IZMX Circuit-breaker

IZMX16: 630 - 1600A
IZMX40: 800 - 4000A

2 Cassette

+IZMX-CAS163-1600 X16, 1600A, 3P
+IZMX-CAS164-1600 X16, 1600A, 4P
+IZMX-CAS403-2000 X40, 2000A, 3P
+IZMX-CAS404-2000 X40, 2000A, 4P
+IZMX-CAS403-2500 X40, 2500A, 3P
+IZMX-CAS404-2500 X40, 2500A, 4P
+IZMX-CAS403-3200 X40, 3200A, 3P
+IZMX-CAS404-3200 X40, 3200A, 4P
+IZMX-CAS403-4000 X40, 4000A, 3P
+IZMX-CAS404-4000 X40, 4000A, 4P

3 Safety Shutter

+IZMX-SH163 X16, 3P
+IZMX-SH164 X16, 4P
+IZMX-SH403 X40, 3P
+IZMX-SH404 X40, 4P

4 Position cell switches

Cell switch signals the position of the breaker inside of the cassette.
Connect, Test and Disconnect Position.
IZMX-CS16-1-2 X16
IZMX-CS40-L-2 X40, left
IZMX-CS40-R-2 X40, right

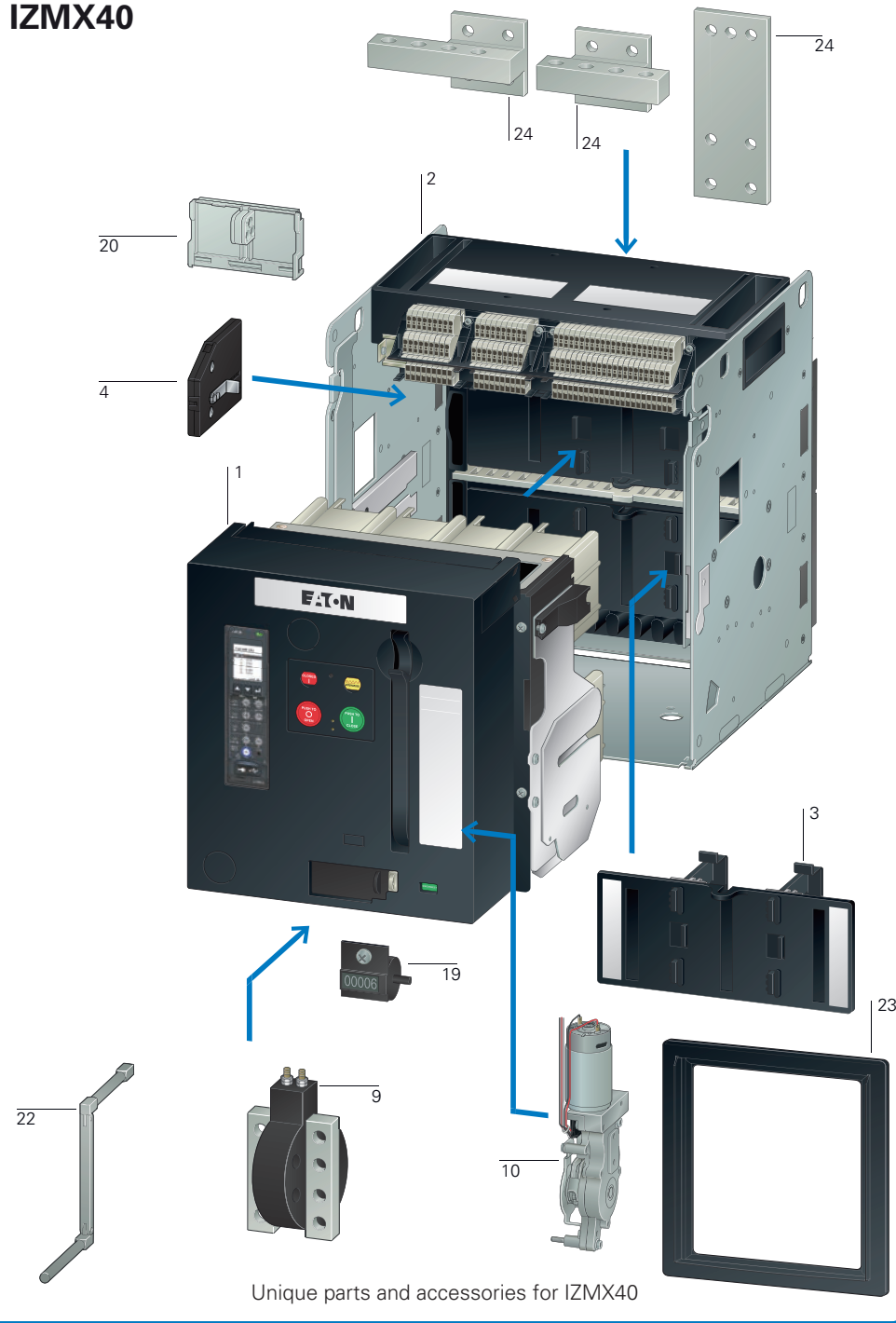
5 Control circuit terminal units

Modular design

6 Trip unit

PXR20, V-type, current metering
C - Onboard Modbus
G - Ground fault protection
M - Arcflash Reduction Maintenance System™
+IZMX-PXRV-C
+IZMX-PXRV-G
+IZMX-PXRV-GC
+IZMX-PXRV-GM
+IZMX-PXRV-GMC

IZMX40



Unique parts and accessories for IZMX40

7 Trip unit

PXR25, U-type, power metering
+IZMX-PXRU-G
+IZMX-PXRU-M
+IZMX-PXRU-GM

8 Communication modules

External modules
IZMX-MCAM-2 Modbus
IZMX-ECAM-2 Ethernet
IZMX-PCAM-2 Profibus DP

9 Current sensor for neutral conductor

Current sensor for sensing the neutral-conductor current.
IZMX-CT16-N-2 X16
IZMX-CT40-N-2 X40

10 Motor operator

Automatic charging of the spring force storage for remote or local operations
+IZMX-M16-24DC X16, 24VDC
+IZMX-M16-110AD X16, 110VAC/DC
+IZMX-M16-230AD X16, 220VAC/DC
+IZMX-M40-24DC X40, 24VDC
+IZMX-M40-110AD X40, 110VAC/DC
+IZMX-M40-230AD X40, 110VAC/DC

11 Shunt releases

Opens the breaker by an electrical signal.
+IZMX-ST24DC 24VDC
+IZMX-ST110AD 110VAC/DC
+IZMX-ST230AD 220VAC/DC

12 Closing releases

Closes the breaker by an electrical signal.
+IZMX-SR24DC 24VDC
+IZMX-SR110AD 110AC/DC
+IZMX-SR230AD 220AC/DC

13 Latch check switch

For external application
Usage
+IZMX-LCS

14 Latch check switch

For use with closing release.
+IZMX-LCS-SR

15 Undervoltage releases

Opens the breaker by a voltage-drop in the control circuit.
+IZMX-UVR24DC 24VDC
+IZMX-UVR110AD 110VAC/DC
+IZMX-UVR220AD 220VAC/DC

16 Auxiliary contacts

Signaling switch ON-OFF.
2a2b standard. 4a4b maximum for IZMX16 and 12a12b for IZMX40
+IZMX-AS22 X16/X40, add 2a2b
+IZMX-AS44 X40, add 4a4b
+IZMX-AS66 X40, add 6a6b
+IZMX-AS88 X40, add 8a8b
+IZMX-AS1010 X40, add 10a10b

17 Trip indicator switches

Overcurrent trip switch (OTS) signals a trip by the trip unit.
+IZMX-OTS

18 Red-pop trip indicator

Red-pop trip indicator signals a trip by the trip unit
Included in breaker with trip unit

19 Switching operations counters

Counts the number of operations.
+IZMX-OC

20 Locking facilities

Plastic or metal
IZMX-PLPC16-P-2 X16, plastic
IZMX-PLPC16-M-2 X16, metal
IZMX-PLPC40-P-2 X40, plastic
IZMX-PLPC40-M-2 X40, metal

21 Key locking

Locking of the breaker by a keylock.
IZMX-KLP-SO-CES-2
IZMX-KLP-SO-KIRK-2
IZMX-KLP-SO-RONIS-2
IZMX-KLP-SO-CASTELL-2

22 Levering tool

Lev-in tool to move the breaker in and out of the cassette. Standard Omega shaped handle is included in D/O breaker. Optional collapsible handle can be ordered separately

23 Door escutcheon

Closes the gap between Breaker and Switchgear-door.
IP31 included in breaker

24 Main terminal kits

Universal terminals, 3- and 4-pole horizontal/vertical
IZMX-THV163-2 X16, 3P
IZMX-THV164-2 X16, 4P
IZMX-THV403-3200-2 X40, 3P, 3200A
IZMX-THV404-3200-2 X40, 4P, 3200A
IZMX-TH403-2 X40, 3P, 4000A, horizontal
IZMX-TV403-2 X40, 3P, 4000A, vertical
IZMX-TH404-2 X40, 4P, 4000A, horizontal
IZMX-TV404-2 X40, 4P, 4000A, vertical

IZMX Series Air Circuit Breakers

IZMX16 Circuit Breaker Basic Device

3P Circuit Breakers of Ammeter Type (Including Type V Trip Unit, 2ON/2OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu} / I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range		Fixed	Withdrawable	
		Overload releases	Short-circuit releases			
		I_r A	Delayed $I_{sd} = I_r \times \dots$	Non-delayed $I_i = I_n \times \dots$	Part no. Article no.	Part no. Article no.
						Cassette must be ordered separately.
42/42	630	252-630	1.5-10	2-15, OFF	IZMX16B3-V06F 123346	IZMX16B3-V06W 122851
42/42	800	320-800	1.5-10	2-15, OFF	IZMX16B3-V08F 123347	IZMX16B3-V08W 122918
42/42	1000	400-1000	1.5-10	2-15, OFF	IZMX16B3-V10F 123348	IZMX16B3-V10W 122920
42/42	1250	500-1250	1.5-10	2-15, OFF	IZMX16B3-V12F 123349	IZMX16B3-V12W 122922
42/42	1600	640-1600	1.5-10	2-15, OFF	IZMX16B3-V16F 123350	IZMX16B3-V16W 122924
50/50	630	252-630	1.5-10	2-15, OFF	IZMX16N3-V06F 123371	IZMX16N3-V06W 123097
50/50	800	320-800	1.5-10	2-15, OFF	IZMX16N3-V08F 123372	IZMX16N3-V08W 123099
50/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16N3-V10F 123373	IZMX16N3-V10W 123101
50/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16N3-V12F 123374	IZMX16N3-V12W 123103
50/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16N3-V16F 123375	IZMX16N3-V16W 123106
66/50	630	252-630	1.5-10	2-15, OFF	IZMX16H3-V06F 123396	IZMX16H3-V06W 123146
66/50	800	320-800	1.5-10	2-15, OFF	IZMX16H3-V08F 123397	IZMX16H3-V08W 123147
66/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16H3-V10F 123398	IZMX16H3-V10W 123148
66/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16H3-V12F 123399	IZMX16H3-V12W 123149
66/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16H3-V16F 123405	IZMX16H3-V16W 123150

IZMX Series Air Circuit Breakers

IZMX16 Circuit Breaker Basic Device

3P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 2ON/2OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu} / I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range		Fixed	Withdrawable	
		Overload releases I_r A	Short-circuit releases			
			Delayed $I_{sd} = I_r \times \dots$			Non-delayed $I_i = I_n \times \dots$
						Cassette must be ordered separately.
42/42	630	252-630	1.5-10	2-15, OFF	IZMX16B3-U06F 123351	IZMX16B3-U06W 122940
42/42	800	320-800	1.5-10	2-15, OFF	IZMX16B3-U08F 123352	IZMX16B3-U08W 122941
42/42	1000	400-1000	1.5-10	2-15, OFF	IZMX16B3-U10F 123353	IZMX16B3-U10W 122979
42/42	1250	500-1250	1.5-10	2-15, OFF	IZMX16B3-U12F 123354	IZMX16B3-U12W 122984
42/42	1600	640-1600	1.5-10	2-15, OFF	IZMX16B3-U16F 123355	IZMX16B3-U16W 123020
50/50	630	252-630	1.5-10	2-15, OFF	IZMX16N3-U06F 123376	IZMX16N3-U06W 123109
50/50	800	320-800	1.5-10	2-15, OFF	IZMX16N3-U08F 123377	IZMX16N3-U08W 123111
50/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16N3-U10F 123378	IZMX16N3-U10W 123114
50/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16N3-U12F 123379	IZMX16N3-U12W 123129
50/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16N3-U16F 123380	IZMX16N3-U16W 123130
66/50	630	252-630	1.5-10	2-15, OFF	IZMX16H3-U06F 123411	IZMX16H3-U06W 123151
66/50	800	320-800	1.5-10	2-15, OFF	IZMX16H3-U08F 123417	IZMX16H3-U08W 123152
66/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16H3-U10F 123423	IZMX16H3-U10W 123153
66/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16H3-U12F 123429	IZMX16H3-U12W 123154
66/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16H3-U16F 123435	IZMX16H3-U16W 123155

IZMX Series Air Circuit Breakers

IZMX16 Circuit Breaker Basic Device

4P Circuit Breakers of Ammeter Type (Including Type V Trip Unit, 2ON/2OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu} / I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.
			Delayed $I_{sd} = I_{rx} \dots$	Non-delayed $I_l = I_{nx} \dots$		
						Cassette must be ordered separately.
42/42	630	252-630	1.5-10	2-15, OFF	IZMX16B4-V06F 123471	IZMX16B4-V06W 123221
42/42	800	320-800	1.5-10	2-15, OFF	IZMX16B4-V08F 123472	IZMX16B4-V08W 123222
42/42	1000	400-1000	1.5-10	2-15, OFF	IZMX16B4-V10F 123473	IZMX16B4-V10W 123223
42/42	1250	500-1250	1.5-10	2-15, OFF	IZMX16B4-V12F 123474	IZMX16B4-V12W 123224
42/42	1600	640-1600	1.5-10	2-15, OFF	IZMX16B4-V16F 123475	IZMX16B4-V16W 123225
50/50	630	252-630	1.5-10	2-15, OFF	IZMX16N4-V06F 123496	IZMX16N4-V06W 123246
50/50	800	320-800	1.5-10	2-15, OFF	IZMX16N4-V08F 123497	IZMX16N4-V08W 123247
50/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16N4-V10F 123498	IZMX16N4-V10W 123248
50/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16N4-V12F 123499	IZMX16N4-V12W 123249
50/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16N4-V16F 123500	IZMX16N4-V16W 123250
66/50	630	252-630	1.5-10	2-15, OFF	IZMX16H4-V06F 123531	IZMX16H4-V06W 123271
66/50	800	320-800	1.5-10	2-15, OFF	IZMX16H4-V08F 123537	IZMX16H4-V08W 123272
66/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16H4-V10F 123543	IZMX16H4-V10W 123273
66/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16H4-V12F 123549	IZMX16H4-V12W 123274
66/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16H4-V16F 123555	IZMX16H4-V16W 123275

4P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 2ON/2OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu} / I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range		Fixed	Withdrawable	
		Overload releases I_r A	Short-circuit releases			
			Delayed $I_{sd} = I_r \times \dots$			Non-delayed $I_i = I_n \times \dots$
						Cassette must be ordered separately.
42/42	630	252-630	1.5-10	2-15, OFF	IZMX16B4-U06F 123476	IZMX16B4-U06W 123226
42/42	800	320-800	1.5-10	2-15, OFF	IZMX16B4-U08F 123477	IZMX16B4-U08W 123227
42/42	1000	400-1000	1.5-10	2-15, OFF	IZMX16B4-U10F 123478	IZMX16B4-U10W 123228
42/42	1250	500-1250	1.5-10	2-15, OFF	IZMX16B4-U12F 123479	IZMX16B4-U12W 123229
42/42	1600	640-1600	1.5-10	2-15, OFF	IZMX16B4-U16F 123480	IZMX16B4-U16W 123230
50/50	630	252-630	1.5-10	2-15, OFF	IZMX16N4-U06F 123501	IZMX16N4-U06W 123251
50/50	800	320-800	1.5-10	2-15, OFF	IZMX16N4-U08F 123502	IZMX16N4-U08W 123252
50/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16N4-U10F 123503	IZMX16N4-U10W 123253
50/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16N4-U12F 123504	IZMX16N4-U12W 123254
50/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16N4-U16F 123505	IZMX16N4-U16W 123255
66/50	630	252-630	1.5-10	2-15, OFF	IZMX16H4-U06F 123561	IZMX16H4-U06W 123276
66/50	800	320-800	1.5-10	2-15, OFF	IZMX16H4-U08F 123567	IZMX16H4-U08W 123277
66/50	1000	400-1000	1.5-10	2-15, OFF	IZMX16H4-U10F 123573	IZMX16H4-U10W 123278
66/50	1250	500-1250	1.5-10	2-15, OFF	IZMX16H4-U12F 123579	IZMX16H4-U12W 123279
66/50	1600	640-1600	1.5-10	2-15, OFF	IZMX16H4-U16F 123580	IZMX16H4-U16W 123285


IZMX Series Air Circuit Breakers

INX16 Switch Disconnecter Basic Device

Switch Disconnecter (Including 2ON/2OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are not included and need to be ordered separately)

Rated short-circuit making capacity	Rated operational current	Circuit breaker type	Rated short-time withstand current	Fixed Part no. Article no.	Withdrawable Part no. Article no.
I_{cm} kA	$I_n = I_u$ A		I_{cw} kA		Cassette must be ordered separately.
88	630	INX16	42	INX16B3-06F 123361	INX16B3-06W 123073
88	800	INX16	42	INX16B3-08F 123362	INX16B3-08W 123076
88	1000	INX16	42	INX16B3-10F 123363	INX16B3-10W 123078
88	1250	INX16	42	INX16B3-12F 123364	INX16B3-12W 123080
88	1600	INX16	42	INX16B3-16F 123365	INX16B3-16W 123083
88	630	INX16	42	INX16B4-06F 123486	INX16B4-06W 123236
88	800	INX16	42	INX16B4-08F 123487	INX16B4-08W 123237
88	1000	INX16	42	INX16B4-10F 123488	INX16B4-10W 123238
88	1250	INX16	42	INX16B4-12F 123489	INX16B4-12W 123239
88	1600	INX16	42	INX16B4-16F 123490	INX16B4-16W 123240

3P Circuit Breakers of Ammeter Type (Including Type V Trip Unit, 4ON/4OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)




Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range	Overload releases		Short-circuit releases		Fixed	Withdrawable
			I_r A	Delayed $I_{sd} = I_r \times \dots$	Non-delayed $I_i = I_n \times \dots$	Part no. Article no.	Part no. Article no.	
								
66	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40B3-V08F 149429	IZMX40B3-V08W 149765	
66	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40B3-V10F 149670	IZMX40B3-V10W 149766	
66	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40B3-V12F 149671	IZMX40B3-V12W 149767	
66	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40B3-V16F 149672	IZMX40B3-V16W 149768	
66	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40B3-V20F 149673	IZMX40B3-V20W 149769	
66	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40B3-V25F 149674	IZMX40B3-V25W 149770	
66	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40B3-V32F 149675	IZMX40B3-V32W 149771	
66	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40B3-V40F 149676	IZMX40B3-V40W 149772	
85	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40N3-V08F 149701	IZMX40N3-V08W 149797	
85	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40N3-V10F 149702	IZMX40N3-V10W 149798	
85	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40N3-V12F 149703	IZMX40N3-V12W 149799	
85	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40N3-V16F 149704	IZMX40N3-V16W 149800	
85	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40N3-V20F 149705	IZMX40N3-V20W 149801	
85	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40N3-V25F 149706	IZMX40N3-V25W 149802	
85	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40N3-V32F 149707	IZMX40N3-V32W 149803	
85	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40N3-V40F 149708	IZMX40N3-V40W 149804	
105	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40H3-V08F 149733	IZMX40H3-V08W 149829	
105	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40H3-V10F 149734	IZMX40H3-V10W 149830	
105	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40H3-V12F 149735	IZMX40H3-V12W 149831	
105	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40H3-V16F 149736	IZMX40H3-V16W 149832	
105	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40H3-V20F 149737	IZMX40H3-V20W 149833	
105	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40H3-V25F 149738	IZMX40H3-V25W 149834	
105	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40H3-V32F 149739	IZMX40H3-V32W 149835	
105	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40H3-V40F 149740	IZMX40H3-V40W 149836	

Cassette must be ordered separately.


IZMX Series Air Circuit Breakers

IZMX40 Circuit Breaker Basic Device

3P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 4ON/4OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range	Overload releases		Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.
			I_r A		Delayed $I_{sd} = I_{rx} \dots$	Non-delayed $I_i = I_{nx} \dots$		
								Cassette must be ordered separately.
66	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40B3-U08F 149677	IZMX40B3-U08W 149773	
66	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40B3-U10F 149678	IZMX40B3-U10W 149774	
66	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40B3-U12F 149679	IZMX40B3-U12W 149775	
66	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40B3-U16F 149680	IZMX40B3-U16W 149776	
66	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40B3-U20F 149681	IZMX40B3-U20W 149777	
66	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40B3-U25F 149682	IZMX40B3-U25W 149778	
66	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40B3-U32F 149683	IZMX40B3-U32W 149779	
66	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40B3-U40F 149684	IZMX40B3-U40W 149780	
85	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40N3-U08F 149709	IZMX40N3-U08W 149805	
85	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40N3-U10F 149710	IZMX40N3-U10W 149806	
85	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40N3-U12F 149711	IZMX40N3-U12W 149807	
85	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40N3-U16F 149712	IZMX40N3-U16W 149808	
85	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40N3-U20F 149713	IZMX40N3-U20W 149809	
85	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40N3-U25F 149714	IZMX40N3-U25W 149810	
85	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40N3-U32F 149715	IZMX40N3-U32W 149811	
85	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40N3-U40F 149716	IZMX40N3-U40W 149812	
105	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40H3-U08F 149741	IZMX40H3-U08W 149837	
105	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40H3-U10F 149742	IZMX40H3-U10W 149838	
105	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40H3-U12F 149743	IZMX40H3-U12W 149839	
105	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40H3-U16F 149744	IZMX40H3-U16W 149840	
105	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40H3-U20F 149745	IZMX40H3-U20W 149841	
105	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40H3-U25F 149746	IZMX40H3-U25W 149842	
105	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40H3-U32F 149747	IZMX40H3-U32W 149843	
105	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40H3-U40F 149748	IZMX40H3-U40W 149844	




4P Circuit Breaker of Ammeter Type (Including Type V Trip Unit, 4ON/4OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range	Overload releases		Short-circuit releases		Fixed	Withdrawable
			I_r A	Delayed $I_{sd} = I_r \times \dots$	Non-delayed $I_i = I_n \times \dots$	Part no. Article no.	Part no. Article no.	
								
66	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40B4-V08F 149861	IZMX40B4-V08W 149957	
66	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40B4-V10F 149862	IZMX40B4-V10W 149958	
66	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40B4-V12F 149863	IZMX40B4-V12W 149959	
66	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40B4-V16F 149864	IZMX40B4-V16W 149960	
66	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40B4-V20F 149865	IZMX40B4-V20W 149961	
66	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40B4-V25F 149866	IZMX40B4-V25W 149962	
66	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40B4-V32F 149867	IZMX40B4-V32W 149963	
66	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40B4-V40F 149868	IZMX40B4-V40W 149964	
85	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40N4-V08F 149893	IZMX40N4-V08W 149989	
85	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40N4-V10F 149894	IZMX40N4-V10W 149990	
85	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40N4-V12F 149895	IZMX40N4-V12W 149991	
85	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40N4-V16F 149896	IZMX40N4-V16W 149992	
85	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40N4-V20F 149897	IZMX40N4-V20W 149993	
85	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40N4-V25F 149898	IZMX40N4-V25W 149994	
85	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40N4-V32F 149899	IZMX40N4-V32W 149995	
85	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40N4-V40F 149900	IZMX40N4-V40W 149996	
105	800	IZMX40	320-800	1.5-10	2-15,OFF	IZMX40H4-V08F 149925	IZMX40H4-V08W 150021	
105	1000	IZMX40	400-1000	1.5-10	2-15,OFF	IZMX40H4-V10F 149926	IZMX40H4-V10W 150022	
105	1250	IZMX40	500-1250	1.5-10	2-15,OFF	IZMX40H4-V12F 149927	IZMX40H4-V12W 150023	
105	1600	IZMX40	640-1600	1.5-10	2-15,OFF	IZMX40H4-V16F 149928	IZMX40H4-V16W 150024	
105	2000	IZMX40	800-2000	1.5-10	2-15,OFF	IZMX40H4-V20F 149929	IZMX40H4-V20W 150025	
105	2500	IZMX40	1000-2500	1.5-10	2-15,OFF	IZMX40H4-V25F 149930	IZMX40H4-V25W 150026	
105	3200	IZMX40	1280-3200	1.5-10	2-15,OFF	IZMX40H4-V32F 149931	IZMX40H4-V32W 150027	
105	4000	IZMX40	1600-4000	1.5-10	2-15,OFF	IZMX40H4-V40F 149932	IZMX40H4-V40W 150028	

IZMX Series Air Circuit Breakers

IZMX40 Circuit Breaker Basic Device

4P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 4ON/4OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range	Overload releases		Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.
			I_r A		Delayed $I_{sd} = I_{rx} \dots$	Non-delayed $I_i = I_{nx} \dots$		
								Cassette must be ordered separately.
66	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40B4-U08F 149869	IZMX40B4-U08W 149965	
66	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40B4-U10F 149870	IZMX40B4-U10W 149966	
66	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40B4-U12F 149871	IZMX40B4-U12W 149967	
66	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40B4-U16F 149872	IZMX40B4-U16W 149968	
66	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40B4-U20F 149873	IZMX40B4-U20W 149969	
66	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40B4-U25F 149874	IZMX40B4-U25W 149970	
66	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40B4-U32F 149875	IZMX40B4-U32W 149971	
66	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40B4-U40F 149876	IZMX40B4-U40W 149972	
85	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40N4-U08F 149901	IZMX40N4-U08W 149997	
85	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40N4-U10F 149902	IZMX40N4-U10W 149998	
85	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40N4-U12F 149903	IZMX40N4-U12W 149999	
85	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40N4-U16F 149904	IZMX40N4-U16W 150000	
85	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40N4-U20F 149905	IZMX40N4-U20W 150001	
85	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40N4-U25F 149906	IZMX40N4-U25W 150002	
85	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40N4-U32F 149907	IZMX40N4-U32W 150003	
85	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40N4-U40F 149908	IZMX40N4-U40W 150004	
105	800	IZMX40	320-800	1.5-10	2-15, OFF	IZMX40H4-U08F 149933	IZMX40H4-U08W 150029	
105	1000	IZMX40	400-1000	1.5-10	2-15, OFF	IZMX40H4-U10F 149934	IZMX40H4-U10W 150030	
105	1250	IZMX40	500-1250	1.5-10	2-15, OFF	IZMX40H4-U12F 149935	IZMX40H4-U12W 150031	
105	1600	IZMX40	640-1600	1.5-10	2-15, OFF	IZMX40H4-U16F 149936	IZMX40H4-U16W 150032	
105	2000	IZMX40	800-2000	1.5-10	2-15, OFF	IZMX40H4-U20F 149937	IZMX40H4-U20W 150033	
105	2500	IZMX40	1000-2500	1.5-10	2-15, OFF	IZMX40H4-U25F 149938	IZMX40H4-U25W 150034	
105	3200	IZMX40	1280-3200	1.5-10	2-15, OFF	IZMX40H4-U32F 149939	IZMX40H4-U32W 150035	
105	4000	IZMX40	1600-4000	1.5-10	2-15, OFF	IZMX40H4-U40F 149940	IZMX40H4-U40W 150036	

IZMX Series Air Circuit Breakers

INX40 Switch Disconnecter Basic Device

Switch Disconnecter (4ON/4OFF Auxiliary Contacts, some Secondary Terminal Blocks. Main Wiring Terminal are no included and need to be ordered separately)

Rated short-circuit making capacity	Rated operational current	Circuit breaker type	Rated short-time withstand current	Fixed Part no. Article no.	Withdrawable Part no. Article no.
I_{cm} kA	$I_n = I_u$ A		I_{cw} kA		Cassette must be ordered separately.
145	800	INX40	66	INX40B3-08F 150045	INX40B3-08W 150069
145	1000	INX40	66	INX40B3-10F 150046	INX40B3-10W 150070
145	1250	INX40	66	INX40B3-12F 150047	INX40B3-12W 150071
145	1600	INX40	66	INX40B3-16F 150048	INX40B3-16W 150072
145	2000	INX40	66	INX40B3-20F 150049	INX40B3-20W 150073
145	2500	INX40	66	INX40B3-25F 150050	INX40B3-25W 150074
145	3200	INX40	66	INX40B3-32F 150051	INX40B3-32W 150075
145	4000	INX40	66	INX40B3-40F 150052	INX40B3-40W 150076
187	800	INX40	85	INX40N3-08F 150053	INX40N3-08W 150077
187	1000	INX40	85	INX40N3-10F 150054	INX40N3-10W 150078
187	1250	INX40	85	INX40N3-12F 150055	INX40N3-12W 150079
187	1600	INX40	85	INX40N3-16F 150056	INX40N3-16W 150080
187	2000	INX40	85	INX40N3-20F 150057	INX40N3-20W 150081
187	2500	INX40	85	INX40N3-25F 150058	INX40N3-25W 150082
187	3200	INX40	85	INX40N3-32F 150059	INX40N3-32W 150083
187	4000	INX40	85	INX40N3-40F 150060	INX40N3-40W 150084

IZMX Series Air Circuit Breakers

INX40 Switch Disconnecter Basic Device

Switch Disconnecter (4ON/4OFF Auxiliary Contacts, Main terminals are not included and need to be ordered separately)

Rated short-circuit making capacity	Rated operational current	Circuit breaker type	Rated short-time withstand current	Fixed Part no. Article no.	Withdrawable Part no. Article no.
I_{cm} kA	$I_n = I_u$ A		I_{cw} kA		
145	800	INX40	66	INX40B4-08F 150093	INX40B4-08W 150117
145	1000	INX40	66	INX40B4-10F 150094	INX40B4-10W 150118
145	1250	INX40	66	INX40B4-12F 150095	INX40B4-12W 150119
145	1600	INX40	66	INX40B4-16F 150096	INX40B4-16W 150120
145	2000	INX40	66	INX40B4-20F 150097	INX40B4-20W 150121
145	2500	INX40	66	INX40B4-25F 150098	INX40B4-25W 150122
145	3200	INX40	66	INX40B4-32F 150099	INX40B4-32W 150123
145	4000	INX40	66	INX40B4-40F 150100	INX40B4-40W 150124
187	800	INX40	85	INX40N4-08F 150101	INX40N4-08W 150125
187	1000	INX40	85	INX40N4-10F 150102	INX40N4-10W 150126
187	1250	INX40	85	INX40N4-12F 150103	INX40N4-12W 150127
187	1600	INX40	85	INX40N4-16F 150104	INX40N4-16W 150128
187	2000	INX40	85	INX40N4-20F 150105	INX40N4-20W 150129
187	2500	INX40	85	INX40N4-25F 150106	INX40N4-25W 150130
187	3200	INX40	85	INX40N4-32F 150107	INX40N4-32W 150131
187	4000	INX40	85	INX40N4-40F 150108	INX40N4-40W 150132

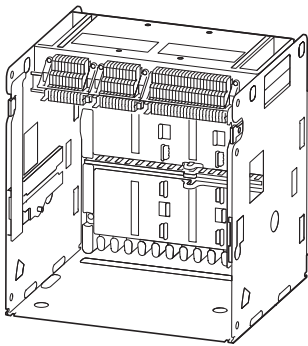
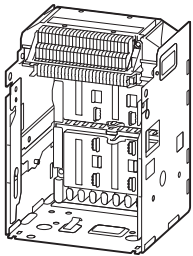
Cassette must be ordered separately.

IZMX-CAS...

Pole-	For use with	Cat. No. Part no. Article no.	Instructions
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Cassettes

Equipment supplied: arcing chamber cover, Safety coding for basic device

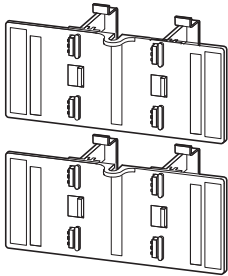


3	IZMX16...3-...W INX16...3-...W up to 1600 A	+IZMX-CAS163-1600 101536	With control circuit terminals according to ordered options.
3	IZMX16...3-...W INX16...3-...W up to 1600 A	IZMX-CAS163-1600-SEC-2 180198	With control conductor terminals fully fitted.
4	IZMX16...4-...W INX16...4-...W up to 1600 A	+IZMX-CAS164-1600 101538	With control circuit terminals according to ordered options.
4	IZMX16...4-...W INX16...4-...W up to 1600 A	IZMX-CAS164-1600-SEC-2 180135	With control conductor terminals fully fitted.
3	IZMX40...3-...W INX40...3-...W up to 2000 A	+IZMX-CAS403-2000 150067	With control circuit terminals according to ordered options.
3	IZMX40...3-...W INX40...3-...W 800A-2000A, 65kA	IZMX-CAS403-2000-SEC-2 180329	With control conductor terminals fully fitted.
4	IZMX40...4-...W INX40...4-...W up to 2000 A	+IZMX-CAS404-2000 150086	With control circuit terminals according to ordered options.
4	IZMX40...4-...W INX40...4-...W 800A-2000A, 65kA	IZMX-CAS404-2000-SEC-2 180331	With control conductor terminals fully fitted.
3	IZMX40...3-...W INX40...3-...W 2500 A	+IZMX-CAS403-2500 122787	With control circuit terminals according to ordered options.
3	IZMX40...3-...W INX40...3-...W 2500A, 65kA	IZMX-CAS403-2500-SEC-2 180158	With control conductor terminals fully fitted.
4	IZMX40...4-...W INX40...4-...W 2500 A	+IZMX-CAS404-2500 122890	With control circuit terminals according to ordered options.
4	IZMX40...4-...W INX40...4-...W 2500A, 65kA	IZMX-CAS404-2500-SEC-2 180166	With control conductor terminals fully fitted.
3	IZMX40...3-...W INX40...3-...W 3200 A	+IZMX-CAS403-3200 150061	With control circuit terminals according to ordered options.
3	IZMX40...3-...W INX40...3-...W 800A-3200A, 65kA/85kA/100kA	IZMX-CAS403-3200-SEC-2 180325	With control conductor terminals fully fitted.
4	IZMX40...4-...W INX40...4-...W 3200 A	+IZMX-CAS404-3200 150064	With control circuit terminals according to ordered options.
4	IZMX40...4-...W INX40...4-...W 800A-3200A, 65kA/85kA/100kA	IZMX-CAS404-3200-SEC-2 180327	With control conductor terminals fully fitted.
3	IZMX40...3-...W INX40...3-...W 4000 A	+IZMX-CAS403-4000 122886	With control circuit terminals according to ordered options.
3	IZMX40...3-...W INX40...3-...W 4000A, 65kA/85kA/100kA	IZMX-CAS403-4000-SEC-2 180160	With control conductor terminals fully fitted.
4	IZMX40...4-...W INX40...4-...W 4000 A	+IZMX-CAS404-4000 122900	With control circuit terminals according to ordered options.
4	IZMX40...4-...W INX40...4-...W 4000A, 65kA/85kA/100kA	IZMX-CAS404-4000-SEC-2 180168	With control conductor terminals fully fitted.

IZMX Series Air Circuit Breakers



Shutter, Cell Switch and Terminal Block

IZMX-SH..., IZMX-CS..., IZMX-SEC-TB...

	Pole-	For use with	Cat. No. Part no. Article no.	Instructions
Cassette safety shutters				
When the breaker is withdrawn from its connected position, the shutters automatically cover the cassette's live main terminals.				
	3	(+)IZMX-CAS163...	IZMX-SH163-2 180151	–
	3	(+)IZMX-CAS163...	+IZMX-SH163 101541	–
	4	(+)IZMX-CAS164...	IZMX-SH164-2 180152	–
	4	(+)IZMX-CAS164...	+IZMX-SH164 101543	–
	3	(+)IZMX-CAS403...	IZMX-SH403-2 180171	–
	3	(+)IZMX-CAS403...	+IZMX-SH403 122905	–
	4	(+)IZMX-CAS404...	IZMX-SH404-2 180174	–
	4	(+)IZMX-CAS404...	+IZMX-SH404 122908	–

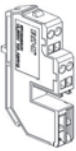
Cell switches

One changeover contact for position Disconnected, Test, Connected.

	Installation on left in the cassette	(+)IZMX-CAS16...	IZMX-CS16-1-2 180153	–
	Installation on left in the cassette	(+)IZMX-CAS40...	IZMX-CS40-L-2 180143	–
	Installation on right in the cassette	(+)IZMX-CAS40...	IZMX-CS40-R-2 180144	–


Control circuit terminal block for withdrawable mounting

IZMX16 has maximum 14 kits and IZMX40 has 24 maximum

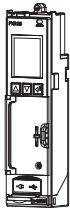
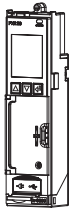
	Control circuit terminals, 8 units	(+)IZMX-CAS...	IZMX-SEC-TB8-W-2 180355	–
	Control circuit terminals, 20 units	(+)IZMX-CAS...	IZMX-SEC-TB20-W-2 180356	–
	Control circuit terminals, 30 units	(+)IZMX-CAS...	IZMX-SEC-TB30-W-2 180357	–

Control circuit terminal units for fixed mounting

IZMX16 has maximum 14 kits and IZMX40 has 24 maximum

	Control circuit terminals, 8 units	IZMX16..., INX16... IZMX40..., INX40...	IZMX-SEC-TB8-F-2 180358	–
	Control circuit terminals, 20 units	IZMX16..., INX16... IZMX40..., INX40...	IZMX-SEC-TB20-F-2 180359	–
	Control circuit terminals, 30 units	IZMX16..., INX16... IZMX40..., INX40...	IZMX-SEC-TB30-F-2 180360	–

IZMX-PXRV..., IZMX-PXRU



	For use with	Ground Earth-Fault Protection (G)	ARMS (M)	Onboard ModBUS Communication (C)	Part no. Article no. Suffix + for ordering with circuit breaker basic device
Type V trip unit with current metering (with LSI protection function, current metering and zone selective protection function ZSI)					
	–	–	–	–	IZMX-PXRV
Add-on functions for current metering Type V (PXR20)					
Add onboard Modbus	IZMX...V...	–	–	●	+IZMX-PXRV-C 180394
Add ground fault protection	IZMX...V...	●	–	–	+IZMX-PXRV-G 180386
Add ground fault protection and onboard Modbus	IZMX...V...	●	–	●	+IZMX-PXRV-GC 180396
Add ground fault protection and ARMs	IZMX...V...	●	●	–	+IZMX-PXRV-GM 180398
Add ground fault protection, onboard Modbus and ARMs	IZMX...V...	●	●	●	+IZMX-PXRV-GMC 180400
Type U Trip Unit with Power Metering (with LSI protection function, power metering²⁾, zone selective protection function and onboard Modbus)					
Onboard ModBUS is standard on all PXR25 trip units	–	–	–	●	IZMX-PXRU
Add-on functions for power metering Type U (PXR25)					
Add ground fault protection, U type	IZMX...U...	●	–	●	+IZMX-PXRU-G 180388
Add ARMs, U type	IZMX...U...	–	●	●	+IZMX-PXRU-M 180390
Add ground fault protection and ARMs, U type	IZMX...U...	●	●	●	+IZMX-PXRU-GM 180392

Notes: ¹⁾ 3 pole breaker need an external wired N-conductor current transformer.

²⁾ Power metering requires one external voltage transformer module ...PTM for 1-16 trip units.

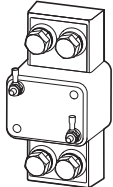
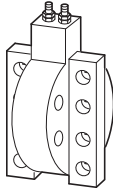
IZMX Series Air Circuit Breakers

Accessories for Electronic Releases, Current Sensors

Accessories for Electronic Releases

Description	For use with	Rated control voltage U_s V	Cat. No. Part no. Article no.	Note
Power supply				
External trip unit power adapter	IZMX16... IZMX40...	115/230VAC input 24VDC, 1.5A output	EASY400-POW-CN 90000019401271	DIN rail mount Order separately
Externally mounted voltage transformer to provide voltage sensing input to U type trip unit. One PT Module may connect up to 16 IZMX breakers, to a maximum of 75 meters distance	IZMX16... IZMX40...	–	IZMX-PXR-PTM-2 183125	DIN rail mount Order separately, not included in U type trip unit
Communication modules				
Communication module ETHERNET	–	IZMX16... IZMX40...	–	IZMX-ECAM-2 180133 DIN rail mount Order separately
Communication module MODBUS	–	IZMX16... IZMX40...	–	IZMX-MCAM-2 180161 DIN rail mount Order separately
Communication module PROFIBUS	–	IZMX16... IZMX40...	–	IZMX-PCAM-2 180176 DIN rail mount Order separately

IZMX-CT...

	Rated current I_n A	For use with	Cat. No. Part no. Article no.
Current sensor for neutral conductor on 3-pole circuit-breakers			
	–	IZMX16...	IZMX-CT16-N-2 180138
for IZMX16 Externally mounted neutral sensor for residual ground.			
	–	IZMX40...	IZMX-CT40-N-2 180381
for IZMX40 Externally mounted neutral sensor for residual ground.			

IZMX-M...

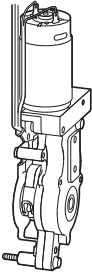
Rated control voltage	For use with	Cat. No. Part no. Article no.	Instructions
U _s V			

Motor operator

The motor automatically tensions the spring force storage mechanism for remote or local actuation.

A signaling switch for the „Spring force storage charged“ message is included as standard

for IZMX16



24 V DC	IZMX16... INX16...	IZMX-M16-24DC-2 180182	For retrofitting, two additional control circuit terminal units are required. → page 12
24 V DC	IZMX16... INX16...	+IZMX-M16-24DC 123593	
48 V DC	IZMX16... INX16...	IZMX-M16-48DC-2 180183	
48 V DC	IZMX16... INX16...	+IZMX-M16-48DC 123595	
110 - 127 V AC 50/60 Hz 110 - 125 V DC	IZMX16... INX16...	IZMX-M16-110AD-2 180141	
110 - 127 V AC 50/60 Hz 110 - 125 V DC	IZMX16... INX16...	+IZMX-M16-110AD 124265	
208 - 240 V AC 50/60 Hz 220 - 250 V DC	IZMX16... INX16...	IZMX-M16-230AD-2 180142	
208 - 240 V AC 50/60 Hz 220 - 250 V DC	IZMX16... INX16...	+IZMX-M16-230AD 124267	

for IZMX40

24 V DC	IZMX40... INX40...	IZMX-M40-24DC-2 180091
24 V DC	IZMX40... INX40...	+IZMX-M40-24DC 124290
48 V DC	IZMX40... INX40...	IZMX-M40-48DC-2 180092
48 V DC	IZMX40... INX40...	+IZMX-M40-48DC 124292
110 - 127 V AC 50/60 Hz 110 - 125 V DC	IZMX40... INX40...	IZMX-M40-110AD-2 180094
110 - 127 V AC 50/60 Hz 110 - 125 V DC	IZMX40... INX40...	+IZMX-M40-110AD 124296
208 - 240 V AC 50/60 Hz 220 - 250 V DC	IZMX40... INX40...	IZMX-M40-230AD-2 180378
208 - 240 V AC 50/60 Hz 220 - 250 V DC	IZMX40... INX40...	+IZMX-M40-230AD 156647

IZMX Series Air Circuit Breakers

Releases

IZMX-ST..., IZMX-STs...

Rated control-voltage

For use with

Cat. No.
Part no.
Article no.

Instructions

U_s
V

Shunt releases

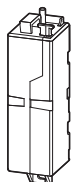
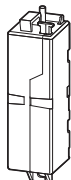
Can be combined with an undervoltage release or a second shunt release.

24 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-ST24DC-2 180185	An additional control circuit terminal block is required for retrofitting. → page 12
24 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-ST24DC 123607	
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-ST48DC-2 180186	An additional control circuit terminal block is required for retrofitting. → page 12
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-ST48DC 123616	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-ST110AD-2 180187	An additional control circuit terminal block is required for retrofitting. → page 12
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-ST110AD 123696	
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-ST230AD-2 180188	An additional control circuit terminal block is required for retrofitting. → page 12
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-ST230AD 123729	

Second shunt release

Cannot be combined with an undervoltage release..

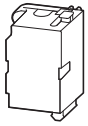
24 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-STs24DC 123731	An additional control circuit terminal block is required for retrofitting. → page 12
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-STs48DC 123732	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-STs110AD 123733	An additional control circuit terminal block is required for retrofitting. → page 12
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-STs230AD 123734	



IZMX-SR..., IZMX-LCS...

Rated control-voltage	For use with	Cat. No. Part no. Article no.	Instructions
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U_s
V



Closing releases

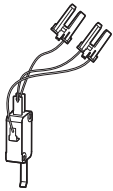
Without latch check switch.

24 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-SR24DC-2 180189	
24 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-SR24DC 123735	
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-SR48DC-2 180190	
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-SR48DC 123737	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-SR110AD-2 180191	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-SR110AD 123739	
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-SR230AD-2 180192	
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-SR230AD 123741	

Latch check switches

1 changeover contact

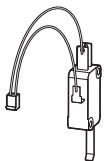
Only in combination with closing release



-	IZMX16..., IZMX40... INX16..., INX40...	IZMX-LCS-2 180104	For external application
-	IZMX16..., IZMX40... INX16..., INX40...	IZMX-LCS40 124348	
-	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-LCS 124347	

Automatic closing after readiness for operation.

Only in combination with closing release.



-	IZMX16..., IZMX40... INX16..., INX40...	IZMX-LCS-SR-2 180113	For use with closing release IZMX-SR...
-	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-LCS-SR 124349	

IZMX Series Air Circuit Breakers

Electrical Accessories

IZMX-UVR(-TD)..., IZMX-AS...

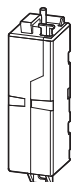
Rated control-voltage

For use with

Cat. No.
Part no.
Article no.

Instructions

U_s
V



Undervoltage releases

Cannot be combined with a second shunt release.

24 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-UVR24DC-2 180193	An additional control circuit terminal block is required for retrofitting. → page 12
24 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-UVR24DC 123743	
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-UVR48DC-2 180194	
48 V DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-UVR48DC 123747	
380-415V AC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-UVR400AC-2 180197	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-UVR110AD-2 180195	
110 - 125 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-UVR110AD 123761	
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	IZMX-UVR220AD-2 180196	
220 - 240 V AC/DC	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-UVR220AD 123841	

Time delay modules

For combination with an undervoltage release.

Delay times: 0.1 s, 0.5 s, 1.0 s, 2.0 s.

120 V AC	IZMX16..., IZMX40... INX16..., INX40...	IZM-UVR-TD-120AC 122956	Only in combination with undervoltage release IZMX-UVR110AD.
230 V AC	IZMX16..., IZMX40... INX16..., INX40...	IZM-UVR-TD-230AC 122957	Only in combination with undervoltage release IZMX-UVR220AD.

Auxiliary contacts

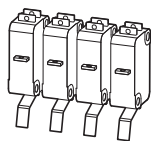
Standard auxiliary switch for On-Off signaling.

IZMX16 (NF): Two additional changeover contacts possible.

(Note: for changeover contacts of IZMX40, when being ordered separately with part number without '+', the wire length varies when being installed in different location, and the article number/part number also varies).

The basic device already contains two changeover contacts.

IZMX40 (RF): up to 10 additional changeover contacts possible.



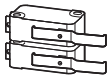
Additionally 2 NO / NC contacts	IZMX16... INX16...	IZMX-AS22-16-2 180361	Same for changeover contacts of No.1&2 or No.3&4
Additionally 2 NO / NC contacts	IZMX40... INX40...	IZMX-AS22-40-2-34 90000019000114	No.3&4 changeover contacts
Additionally 2 NO / NC contacts	IZMX40... INX40...	IZMX-AS22-40-2-56 90000019000115	No.5&6 changeover contacts
Additionally 2 NO / NC contacts	IZMX40... INX40...	IZMX-AS22-40-2-78 90000019000116	No.7&8 changeover contacts
Additionally 2 NO / NC contacts	IZMX40... INX40...	IZMX-AS22-40-2-9A 90000019000117	No.9&10 changeover contacts
Additionally 2 NO / NC contacts	IZMX40... INX40...	IZMX-AS22-40-2-BC 90000019000118	No.11&12 changeover contacts
Additionally 2 NO / NC contacts	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-AS22 123880	–
Additionally 4 NO / NC contacts	IZMX40... INX40...	+IZMX-AS44 123882	–
Additionally 6 NO / NC contacts	IZMX40... INX40...	+IZMX-AS66 124344	–
Additionally 8 NO / NC contacts	IZMX40... INX40...	+IZMX-AS88 124345	–
Additionally 10 NO / NC contacts	IZMX40... INX40...	+IZMX-AS1010 124346	–

Notes: Please indicate "factory install" when placing order, if the 380-415 VAC undervoltage release is to be installed by the factory

IZMX-OTS..., IZMX-TI..., IZMX-RA..., IZMX-RR...

Rated control-voltage	For use with	Cat. No. Part no. Article no.	Instructions
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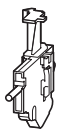
U_s
V



Overcurrent trip switches

Overcurrent trip switch (OTS) with two changeover contacts. Not available on INX switch disconnecter.

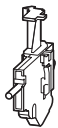
–	IZMX16...	IZMX-OTS16-2 180364	–
–	IZMX40...	IZMX-OTS40-2 180366	–
–	IZMX16..., IZMX40...	+IZMX-OTS 123888	–



Interlocked Trip Indicators

Can be used in combination with Overcurrent Trip Switches and Remote Reset function. Not available on INX switch disconnecter.

–	IZMX16...	IZMX-TI16 156634	Included in IZMX breaker
–	IZMX40...	IZMX-TI40-2 180363	Included in IZMX breaker



Non-Interlocked Trip Indicators

The switch does contain the mechanical trip-indicator (red pin). Does not interlock with mechanism, allowing for automatic reset of breaker. Can be used in combination with Overcurrent Trip Switches. Cannot be combined with remote reset. Not available on INX switch disconnecter.

–	IZMX16...	IZMX-RA16-2 180354	Instead of standard delivery.
–	IZMX40...	IZMX-RA40-2 180365	
–	IZMX16..., IZMX40...	+IZMX-RA 123897	

Remote reset

The breaker can be switched on after a trip as far the trip indicator is resetted manually. The remote reset allows resetting remotely by an electrical signal. Not available on INX switch disconnecter

24 V DC	IZMX16...	IZMX-RR24DC-16-2 180095	–
24 V DC	IZMX40...	IZMX-RR24DC-40-2 180096	–
24 V DC	IZMX16..., IZMX40...	+IZMX-RR24DC 123890	–
110 - 125 V AC/DC	IZMX16...	IZMX-RR110AD-16-2 180097	–
110 - 125 V AC/DC	IZMX40...	IZMX-RR110AD-40-2 180098	–
110 - 125 V AC/DC	IZMX16..., IZMX40...	+IZMX-RR110AD 123892	–
220 - 240 V AC	IZMX16...	IZMX-RR230AD-16-2 180100	–
220 - 240 V AC	IZMX40...	IZMX-RR230AD-40-2 180101	–
220 - 240 V AC/DC	IZMX16..., IZMX40...	+IZMX-RR230AD 123895	–

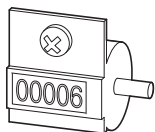
IZMX Series Air Circuit Breakers

Mechanical Accessories

IZMX-OC..., IZMX-PLPC..., IZMX-KLP-SO...

For use with

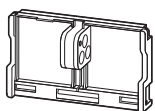
Cat. No.
Part no.
Article no.



Operation counters

Counts the number of ON-OFF operations. Can also be installed without motor operator.

	IZMX16... INX16...	IZMX-OC16-2 180184	
	IZMX40... INX40...	IZMX-OC40-2 180102	
	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-OC 124341	



Locking ON/OFF buttons

Padlockable front cover for ON-OFF pushbutton.

P = Insulated material	IZMX16...	IZMX-PLPC16-P-2 180379	
	IZMX40...	IZMX-PLPC40-P-2 180107	
	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-PLPC-P 124357	
M = Metal	IZMX16...	IZMX-PLPC16-M-2 180380	
	IZMX40...	IZMX-PLPC40-M-2 180105	
	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-PLPC-M 124352	
OFF = Safe OFF; then it is also impossible to switch on via the closing release	IZMX40...	IZMX-PLPC40-M-OFF-2 180106	
	IZMX16..., IZMX40... INX16..., INX40...	+IZMX-PLPC-M-OFF 124355	



Safe OFF lock mechanism for cylinder locks

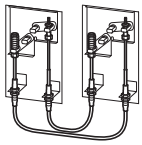
The "Safe OFF" interlock prevents switching on. Neither remote nor local switching on is possible. For corresponding typ of lock cylinder see installation instructions. Lock cylinder and key are required for installation.

CES installation kit without lock cylinder and key. Compatible CES cylinder #5256-LAG, key #90134.	IZMX16..., IZMX40... INX16..., INX40...	IZMX-KLP-SO-CES-2 180108	
Kirk installation kit without lock cylinder and key. Compatible Kirk Keylock #KC40.10.	IZMX16..., IZMX40... INX16..., INX40...	IZMX-KLP-SO-KIRK-2 180109	
Ronis installation kit without lock cylinder and key. Compatible Ronis lock 1351-10B (Dim A = 7 mm).	IZMX16..., IZMX40... INX16..., INX40...	IZMX-KLP-SO-RONIS-2 180111	
Castell installation kit without lock cylinder and key. Compatible Castell Cylinder #CL1019(modified to 90°), key #FKW6-NI	IZMX16..., IZMX40... INX16..., INX40...	IZMX-KLP-SO-CASTELL-2 180112	
Kirk installation kit with lock cylinder and key, A type	IZMX16..., IZMX40... INX16..., INX40...	IZMX-1L1K 90000019000039	
Kirk installation kit with lock cylinder and key, B type	IZMX16..., IZMX40... INX16..., INX40...	IZMX-1L1K-B 90000019000046	The key and lock cylinder of -B and -C are not interchangeable with IZMX-1L1K
Kirk installation kit with lock cylinder and key, C type	IZMX16..., IZMX40... INX16..., INX40...	IZMX-1L1K-C 90000019000047	The key and lock cylinder of -B and -C are not interchangeable with IZMX-1L1K

Notes:

It is recommended to request factory installation for IZMX-1L1K(-B/-C), with no additional installation charge. Service fee will be applied if requesting Eaton field installation service. Contact our sales specialists before ordering.

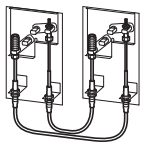
IZMX-MIL...W..., IZMX-MIL...-F..., IZMX-MIL-CAB...



Type 2 requires 2 interlock mounting kits and 1 set of cables

Type 31 requires 3 interlock mounting kits and 2 sets of cables

Type 32 or 33 requires 3 interlock mounting kits and 3 sets of cables



Type 2 requires 2 interlock mounting kits and 1 set of cables

Type 31 requires 3 interlock mounting kits and 2 sets of cables

Type 32 or 33 requires 3 interlock mounting kits and 3 sets of cables

Mechanical interlock, drawout mounting

Type 2, for 2 circuit-breakers: A normal power supply (A) and an emergency network supply (B).

For use with

Cat. No.
Part no.
Article no.

Type 31, for 3 circuit-breakers: Two normal power supplies(A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off.

or
Type 33, for 3 circuit-breakers: Three incoming units (A, B, C), normal or emergency network. Only one of the three circuit breakers can be switched on at any one time.

Type 32, for 3 circuit-breakers: Two normal incoming units (A, C) and one coupling (B). Any one or two circuitbreakers can be closed at the same time.

IZMX16...
IMX16...

IZMX-MIL2C-W16-2
180336

IZMX40...
IMX40...

IZMX-MIL2C-W40-2
180344

IZMX16...
IMX16...

IZMX-MIL3133C-W16-2
183117

IZMX40...
IMX40...

IZMX-MIL3133C-W40-2
183119

IZMX16...
IMX16...

IZMX-MIL32C-W16-2
180338

IZMX40...
IMX40...

IZMX-MIL32C-W40-2
180346

Mechanical interlock, fixed mounting

Type 2, for 2 circuit-breakers: A normal power supply (A) and an emergency network supply (B).

IZMX16..., INX16...

IZMX-MIL2C-F16-2
180332

IZMX40..., INX40...

IZMX-MIL2C-F40-2
180340

Type 31, for 3 circuit-breakers: Two normal power supplies(A, C) and an emergency network supply (B). When B in Off, A and C can be switched on. B can be switched on only when A and C are in Off.

IZMX16..., INX16...

IZMX-MIL3133C-F16-2
183118

IZMX40..., INX40...

IZMX-MIL3133C-F40-2
183120

or
Type 33, for 3 circuit-breakers: Three incoming units (A, B, C), normal or emergency network. Only one of the three circuit breakers can be switched on at any one time. Three sets of cables are required in addition.

Type 32, for 3 circuit-breakers: Two normal incoming units (A, C) and one coupling (B). Any one or two circuit-breakers can be closed at the same time.

IZMX16..., INX16...

IZMX-MIL32C-F16-2
180334

IZMX40..., INX40...

IZMX-MIL32C-F40-2
180342

Cable kits for mechanical interlock

Depending on the type of interlock, a particular number of cable connectors is required. With the flexible cable connectors, various different switch arrangements can be implemented. One set contains two cables.

1520 mm long

IZMX-MIL...C-F...
IZMX-MIL...C-W...

IZMX-MIL-CAB1520-2
180348

1830 mm long

IZMX-MIL...C-F...
IZMX-MIL...C-W...

IZMX-MIL-CAB1830-2
180349

2440 mm long

IZMX-MIL...C-F...
IZMX-MIL...C-W...

IZMX-MIL-CAB2440-2
180350

3050 mm long

IZMX-MIL...C-F...
IZMX-MIL...C-W...

IZMX-MIL-CAB3050-2
180351

Interlock among X16, X40, fixed or withdrawable:

Example: A type 33 configuration including 1 IZMX40 drawout, 1 IZMX40 fixed, and 1 IZMX16 drawout with 3050mm cables, order:

1. IZMX-MIL3133C-W40-2, QTY: 1, for 1 IZMX40 drawout
2. IZMX-MIL3133C-F40-2, QTY: 1, for 1 IZMX40 fixed
3. IZMX-MIL3133C-W16-2, QTY: 1, for 1 IZMX16 drawout
4. IZMX-MIL-CAB3050-2, QTY:3, for type 33 configuration

IZMX Series Air Circuit Breakers

Mechanical Interlock Configurations

IZMX16, INX16, IZMX40, INX40

Mechanical Interlock configurations

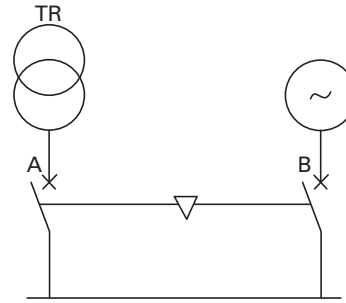
Type 2

Type of interlock

Across Two Circuit Breakers

One normal power supply and one emergency power supply.

Typical circuit



Interlock: A against B

Interlocks possible

Circuit breaker A can only be closed if B is open and vice versa.

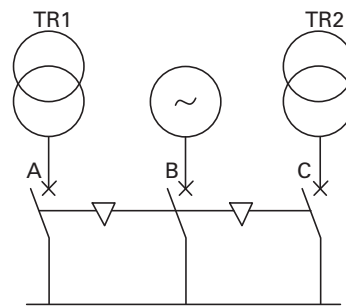
A = Normal power supply
B = Emergency power supply.

A	B
0	0
1	0
0	1

Type 31

Across Three Circuit Breakers

Two normal power supplies and one emergency power supply.



Interlock: A, C against B

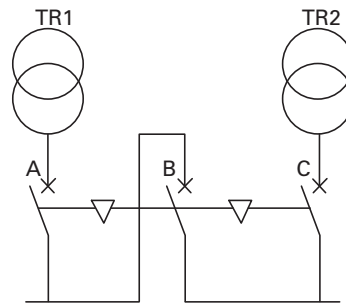
Circuit breaker A and C can only be closed if B is open. B can only be closed when A and C are open.

A	B	C
0	0	0
1	0	0
0	1	0
0	0	1
1	0	1

Type 32

Across Three Circuit Breakers

The two half-bus bars can be powered by a single transformer (bus-tie closed) or by both at the same time (bus-tie open).



Interlock: 2 against 1 or max. 2 of 3

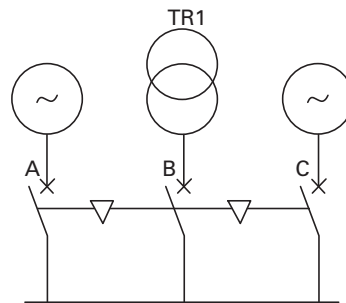
One of two circuit breakers out of three can be closed at the same time.

A	B	C
0	0	0
1	0	0
0	1	0
0	0	1
1	1	0
0	1	1
1	0	1

Type 33

Across Three Circuit Breakers

Three power supplies (generators or transformers) on the same bus bar, making operation in parallel impossible.




Interlock: 1 against 2 or max. 1 of 3

Only one of three circuit breakers can be closed.

A	B	C
0	0	0
1	0	0
0	1	0
0	0	1

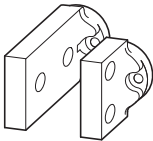
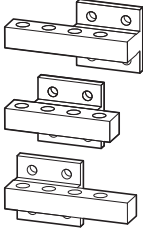
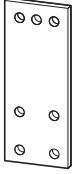
IZMX-LT..., IZMX-DEG..., IZMX-DC...

	For use with	Cat. No. Part no. Article no.	Instructions
Collapsible hand lever			
Standard Omega shaped handle is included in D/O breaker.	IZMX16...W INX16...W	IZMX-LT16-2 180134	–
	IZMX40...W INX40...W	IZMX-LT40-2 180206	–
Door gasket, IP31, for withdrawable breaker			
	IZMX16...W INX16...W	IZMX-DEG16-W-2 180110	Spare part; supplied as standard with every breaker.
	IZMX40...W INX40...W	IZMX-DEG40-W-2 180205	
Door gasket, IP31, for fixed breaker			
	IZMX16...F INX16...F	IZMX-DEG16-F-2 180099	Spare part; supplied as standard with every breaker.
	IZMX40...F INX40...F	IZMX-DEG40-F-2 180204	

IZMX Series Air Circuit Breakers

Terminals

IZMX-T(H)(F)(V)...

Connection	Rated current I_n A	Pole	For use with	Cat. No. Part no. Article no.	Note		
Main terminal component adapter							
Basic cassettes are delivered with flange terminals as standard. Following adapters are optional and for INX16, IZMX16 fixed version requested. Each set contains the connections for top and bottom. 3 pole = 6 off; 4 pole = 8 off							
	Universal connection horizontal, vertical	800 - 1600	3	IZMX16... INX16...	IZMX-THV163-2 180137		
	Universal connection horizontal, vertical	800 - 1600	4	IZMX16... INX16...	IZMX-THV164-2 180136		
	Universal connection horizontal, vertical, long	800 - 1600	3	IZMX16... INX16...	IZMX-THVL163-2 180139	Temp. N/A	
	Universal connection horizontal, vertical, long	800 - 1600	4	IZMX16... INX16...	IZMX-THVL164-2 180140	Temp. N/A	
	Universal connection horizontal, vertical	800 - 3200	3	IZMX40... INX40...	IZMX-THV403-3200-2 180175		
	Connection horizontal	4000	3	IZMX40... INX40...	IZMX-TH403-2 180177		
	Connection vertical	4000	3	IZMX40... INX40...	IZMX-TV403-2 180178		
	Universal connection horizontal, vertical	800 - 3200	4	IZMX40... INX40...	IZMX-THV404-3200-2 180179		
	Connection horizontal	4000	4	IZMX40... INX40...	IZMX-TH404-2 180180		
	Connection vertical	4000	4	IZMX40... INX40...	IZMX-TV404-2 180181		
	Connection front fixed breaker	800 - 1600	3	IZMX40...F INX40...F	IZMX-TF403-1600F 173363	Temp. N/A	
		2000 - 2500	3	IZMX40...F INX40...F	IZMX-TF403-2500F 173367	Temp. N/A	
		3200	3	IZMX40...F INX40...F	IZMX-TF403-3200F 173371	Temp. N/A	
		800 - 1600	4	IZMX40...F INX40...F	IZMX-TF404-1600F 173365	Temp. N/A	
		2000 - 2500	4	IZMX40...F INX40...F	IZMX-TF404-2500F 173369	Temp. N/A	
		3200	4	IZMX40...F INX40...F	IZMX-TF404-3200F 173373	Temp. N/A	
		Connection front withdrawable cassette	800 - 1600	3	IZMX40...W INX40...W	IZMX-TF403-1600W 173364	Temp. N/A
			2000 - 2500	3	IZMX40...W INX40...W	IZMX-TF403-2500W 173368	Temp. N/A
			3200	3	IZMX40...W INX40...W	IZMX-TF403-3200W 173372	Temp. N/A
		800 - 1600	4	IZMX40...W INX40...W	IZMX-TF404-1600W 173366	Temp. N/A	
		2000 - 2500	4	IZMX40...W INX40...W	IZMX-TF404-2500W 173370	Temp. N/A	
		3200	4	IZMX40...W INX40...W	IZMX-TF404-3200W 173374	Temp. N/A	

IZMX16 Control Circuit Terminal Assignment

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	53	55	
+	+																											
ST1	UV1	OT1C	OT1B	ACCY2	N1	ALMC	ALM2	G1	+24V	ZIN	ZCOM	CMM1	CMM3	PTVA	PTVC	MODBA	MODBG	ACCY5	ACCY7	E01	SR1	C1	B1	C2	C3	B3	C4	
-	-																											
ST2	UV2	OT1M	ACCY1	ACCY3	N2	ALM1	ALM3	G2	AGND	ARMSIN	ZOUT	CMM2	CMM4	PTVB	PTVN	MODBB	ACCY4	ACCY6	SC	E02	SR2	A1	B2	A2	A3	B4	A4	
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	

- | | |
|--|--|
| <p>1, 2 - Shunt trip
 3, 4 - UVR/2nd shunt trip
 5~7 - Overload trip switch 1 (OTS) (5-COM, 6-N.O, 7-N.C.)
 8~10 - Overload trip switch 2 (OTS)/ Remote reset (8-N.C., 9-COM, 10-N.O./9-RR1, 10-RR2)
 11,12 - External neutral sensor
 13~16 - Alarm
 17,18 - Ground fault source sensor
 19, 20 - Control voltage supply 24VDC
 21,23,24 - Zone selectivity ZSI</p> | <p>20,22 - ARMs
 25-28 - External CAM module
 29~32 - PT module
 33~35 - Onboard ModBus
 36 - ACCY4 (Reserved)
 37~39 - Latch check switch (37-COM, 38-N.O, 39-N.C.)
 40 - Message :Spring energy store tensioned
 41,42 - Motor operator
 43,44 - Spring closing release
 45~56 - Auxiliary contact On/off, C-COM, A-N.O., B-N.C.</p> |
|--|--|

IZMX40 Control Circuit Terminal Assignment

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	
+	+																							
ST1	UV1	OT1C	OT1B	OT2C	N1	ALMC	ALM2	G1	+24V	ZIN	ZCOM	CMM1	CMM3	PTVA	PTVC	MODBA	MODBG	2CMM3	2CMM1	ARCON2	RR1			
-	-																							
ST2	UV2	OT1M	OT2B	OT2M	N2	ALM1	ALM3	G2	AGND	ARMSIN	ZOUT	CMM2	CMM4	PTVB	PTVN	MODBB	2CMM2	2CMM4	ARCON1	ARCON3	RR2			
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	

- | | |
|--|--|
| <p>1, 2 - Shunt trip
 3, 4 - UVR/2nd shunt trip
 5~7 - Overload trip switch 1 (OTS) (5-COM, 6-N.O, 7-N.C.)
 8~10 - Overload trip switch 2 (OTS) (8-N.C., 9-COM, 10-N.O.)
 11,12 - External neutral sensor
 13~16 - Alarm
 17,18 - Ground fault source sensor
 19, 20 - Control voltage supply 24VDC
 21,23,24 - Zone selectivity ZSI</p> | <p>20,22 - ARMs
 25-28 - External CAM module
 29~32 - PT module
 33~35 - Onboard ModBus
 36~39 - External CAM module (future)
 40~42 - ARCON
 43,44 - Remote reset
 45~48 - Reserved</p> |
|--|--|

49	51	53	55	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95
LCC	LCB	E01	SR1	C1	B1	C2	C3	B3	C4	C5	B5	C6	C7	B7	C8	C9	B9	C10	C11	B11	C12		
		+																					
LOM	SC	E02	SR2	A1	B2	A2	A3	B4	A4	A5	B6	A6	A7	B8	A8	A9	B10	A10	A11	B12	A12		
50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96

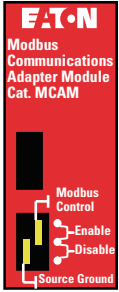
- 49~51 Latch check switch (49-COM, 50-N.O., 51-N.C.)
 52 - Message :Spring energy store tensioned
 53, 54 - Motor operator
 55~56 - Spring closing release
 57~92 - Auxiliary contact On/off, C-COM, A-N.O., B-N.C.

IZMX Series Air Circuit Breakers

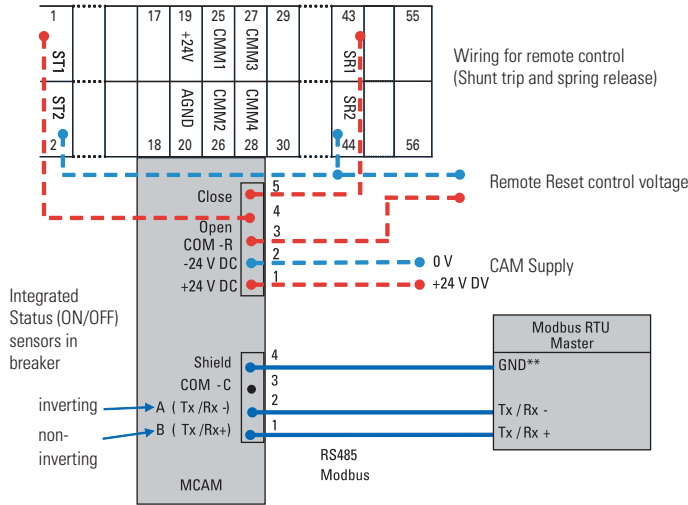
Terminal Assignment of Control Circuit Terminals

IZMX16, INX16, IZMX40, INX40

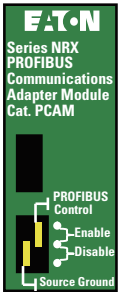
Front View of MCAM



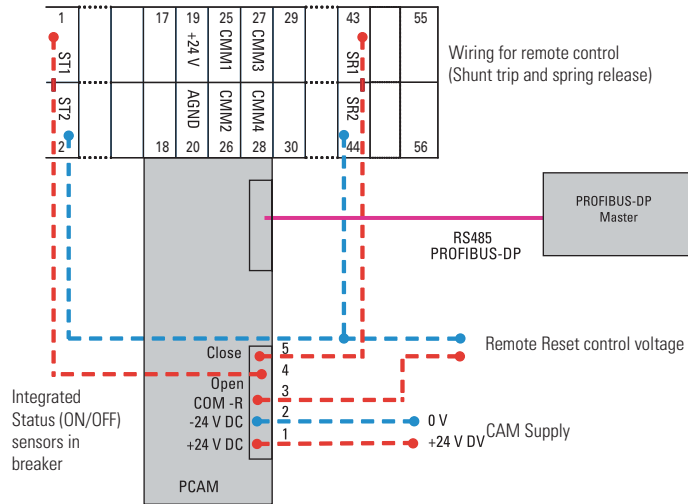
Top View of a mounted MCAM on IZMX



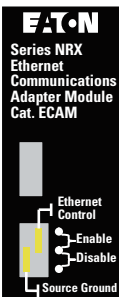
Front View of PCAM



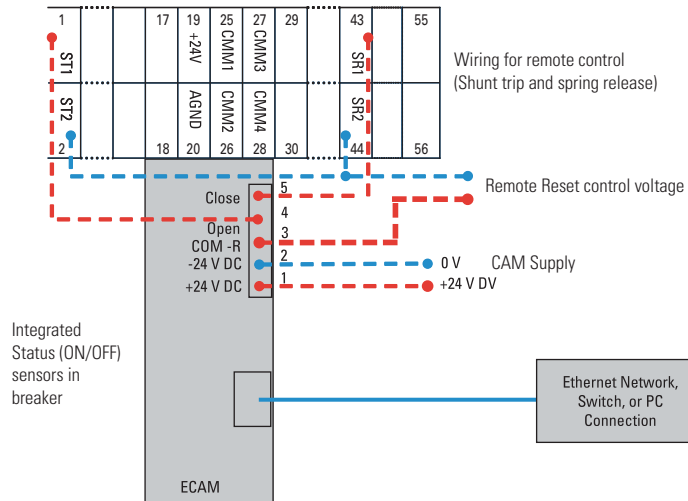
Top View of a mounted PCAM on IZMX



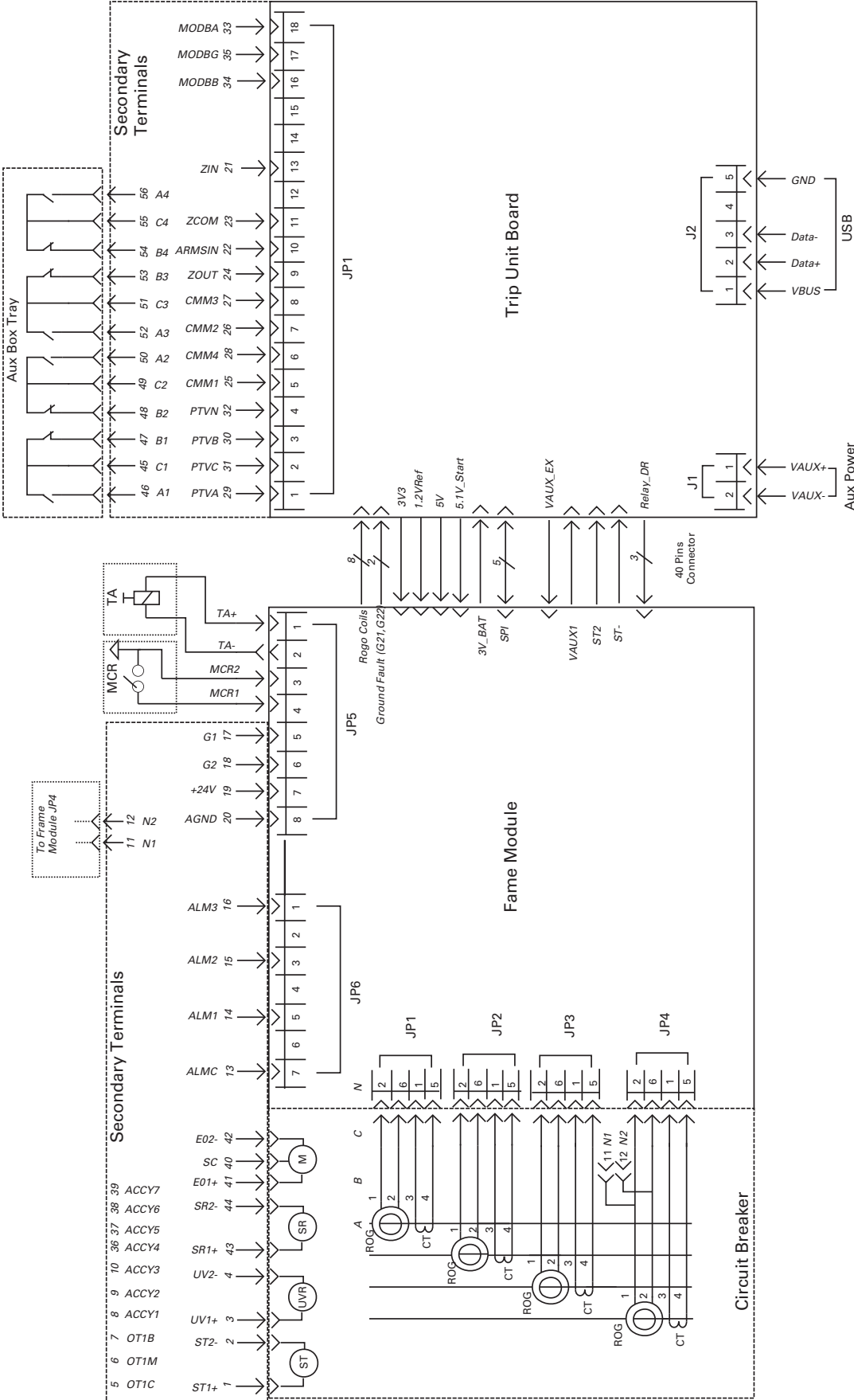
Front View of ECAM



Top View of a mounted ECAM on IZMX



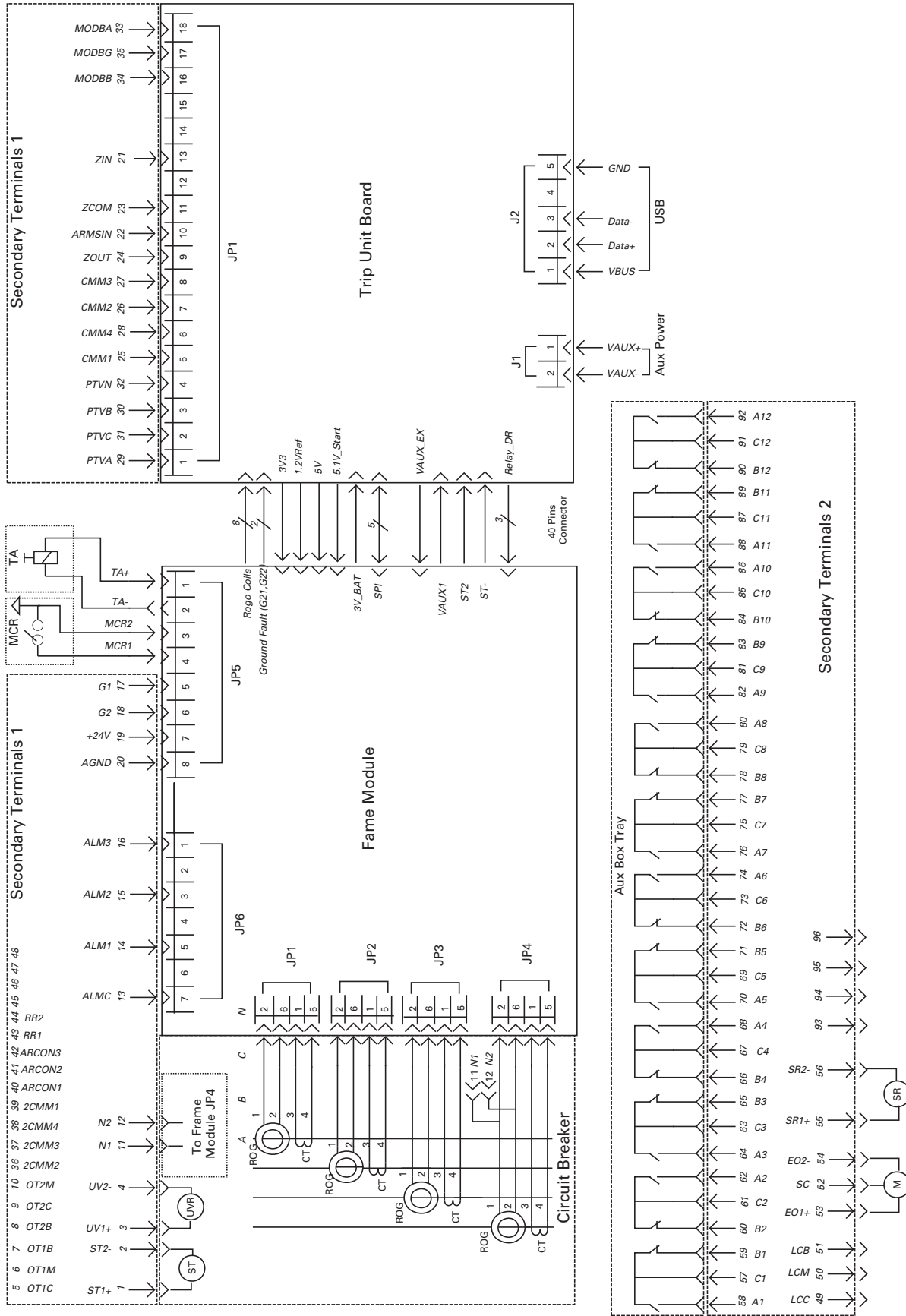
X16 Master connection diagram



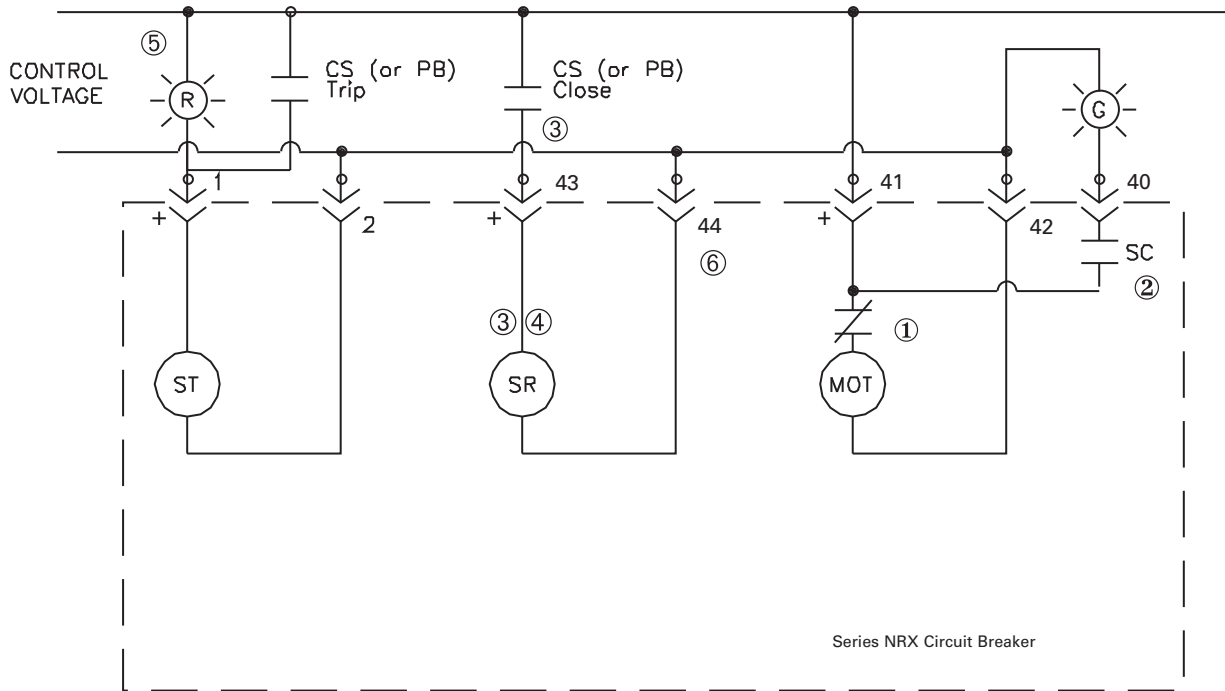
IZMX Series Air Circuit Breakers

Wiring Diagram

X40 Master connection diagram



X16 Circuit Breaker Control



Legend:

- MOT – Motor Operator for Charging Closing Spring
- ST – Shunt Trip
- SR – Spring Release

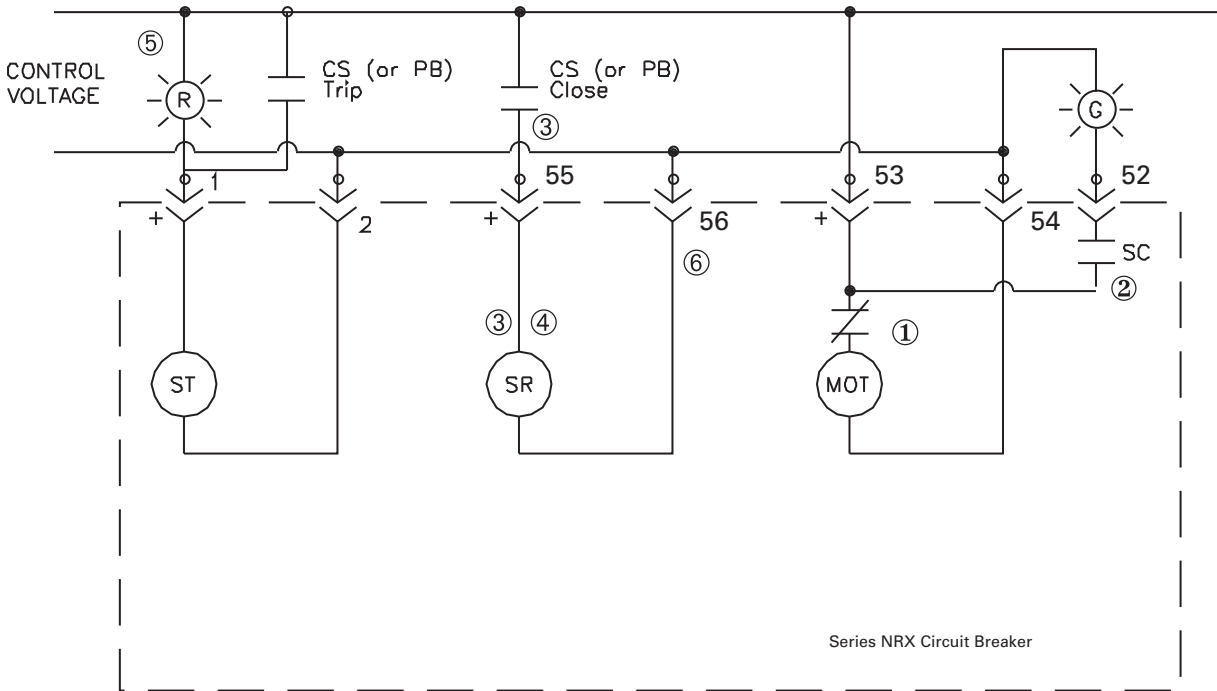
Description of Operation:

1. The motor is energized and runs, charges closing spring, and is cut off by switch.
2. When the spring is charged, the SC closes and the green indicating light will illuminate (if applicable).
3. Closing the CS-C contact energizes the Spring Release Coil and closes the circuit breaker. The Spring Release internal electronics pulse the SR coil and then provides a high impedance circuit. This provides anti-pumping.
4. When the spring discharges its energy, the motor switch will re-energize the charging motor until the spring is charged again.
5. To detect the presence of voltage (Health Light), use Omron Red indicator LED Port # C22-L-R-120 for 120 Vac application. For 230 Vac application, use C22-L-R-230. For 24 Vdc application, use C22-L-R-24. Remove the white (22 mm [0.89 in.]) diameter pilot light) Light Diffuser from the assembly to give better indication of voltage present. Activate the push-button to trip the circuit breaker. See Eaton for other voltages.
6. For secondary contacts, odd numbers should be treated as positive for any accessory. This will not apply to AC ratings.
7. ReferencePage 34 for internal circuit breaker wiring.

IZMX Series Air Circuit Breakers

Wiring Diagram

X40 Circuit Breaker Control



Legend:

MOT – Motor Operator for Charging Closing Spring

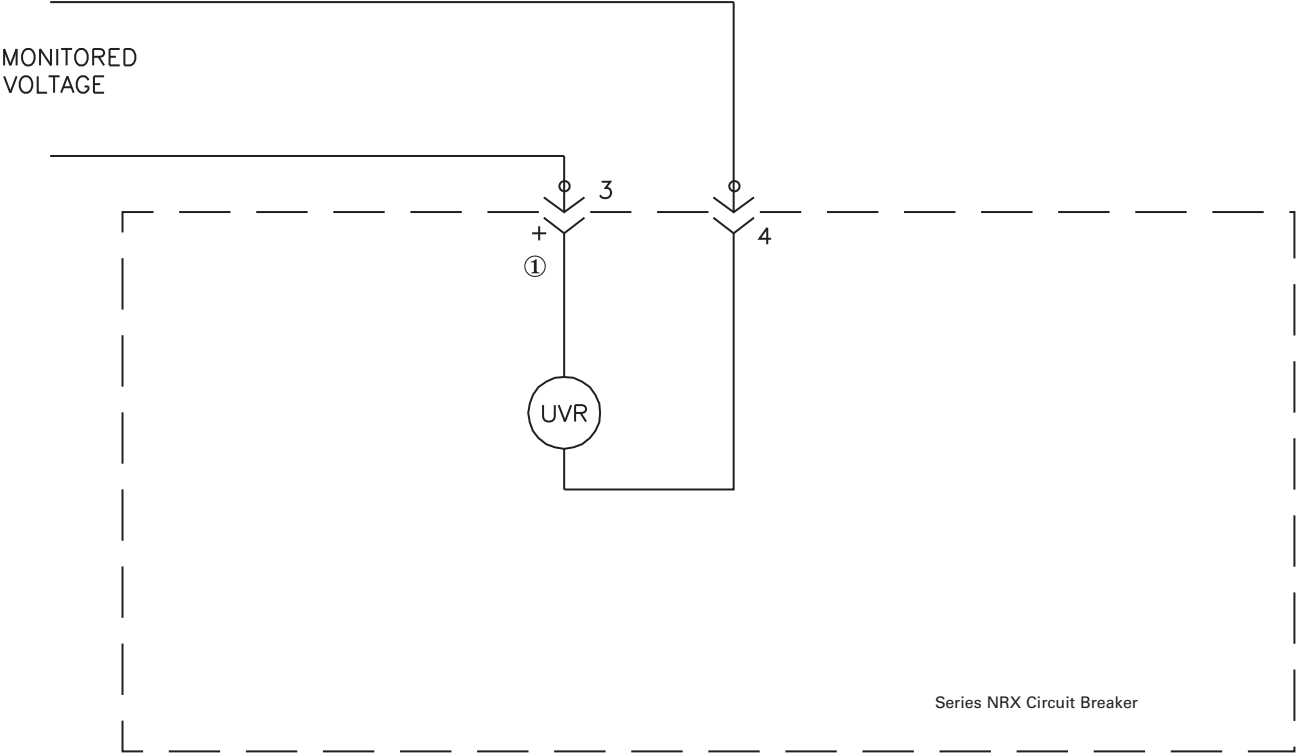
ST – Shunt Trip

SR – Spring Release

Description of Operation:

1. The motor is energized and runs, charges the closing spring, and is cut off by the switch.
2. When the spring is charged, SC closes and the green indicating light will illuminate (if applicable).
3. Closing the CS-C contact energizes Spring Release coil and closes circuit breaker. The Spring Release internal electronics pulse the SR coil and then provides a high impedance circuit. This provides anti-pumping.
4. When the spring discharges its energy, the motor switch will re-energize the charging motor until the spring is charged again.
5. To detect presence of voltage (Health Light), use Omron Red indicator LED Port # C22-L-R-120 for 120 Vac application. For 230 Vac application, use C22-L-R-230. For 24 Vdc application, use C22-L-R-24. Remove the white (22 mm [0.89 in.] diameter pilot light) Light Diffuser from the assembly to give better indication of voltage present. Activate the push-button to trip the circuit breaker. See Eaton for other voltages.
6. For secondary contacts, odd numbers should be treated as positive for any accessory. This will not apply to AC ratings.
7. Reference Page 35 for internal circuit breaker wiring.

Under Voltage Release



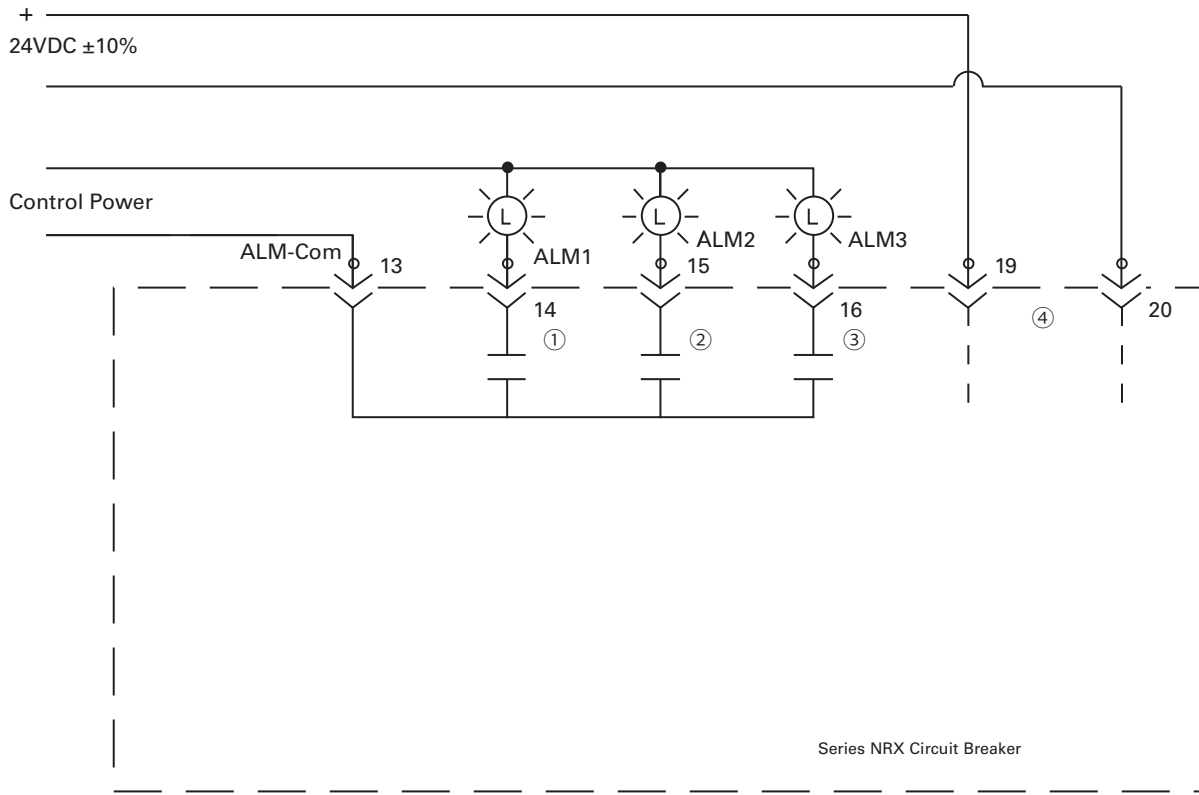
Notes:

1. Treated as the positive voltage for DC ratings.

IZMX Series Air Circuit Breakers

Wiring Diagram

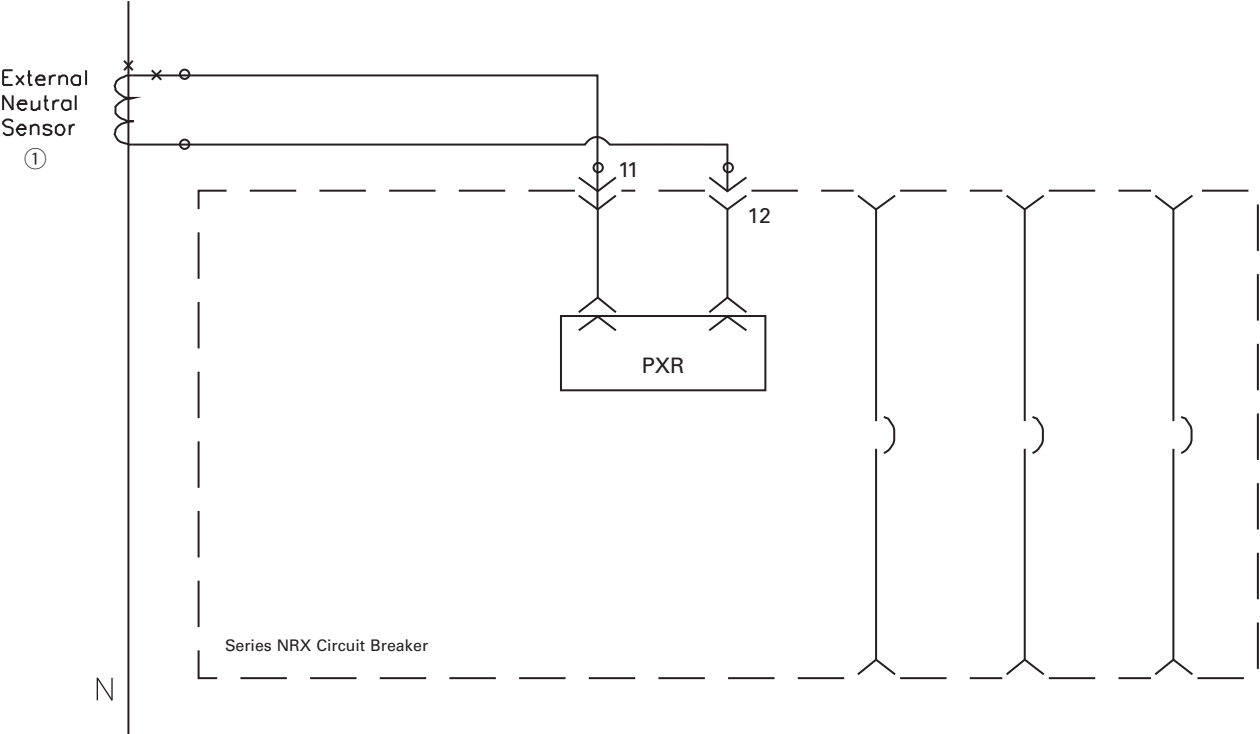
PXR Alarm Wiring



Notes:

1. For the PXR20/25, the Alarm 1 is for Remote Indication/ Maintenance Mode indication. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
2. For the PXR20/25, the Alarm 2 is for High Load alarm/Ground Fault alarm. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
3. For the PXR20/25, the Alarm 3 is for Trip N.O. contact. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
4. If the control voltage is +24 Vdc, the trip unit should be fed from a separate, galvanically isolated + 24 V voltage dc supply.

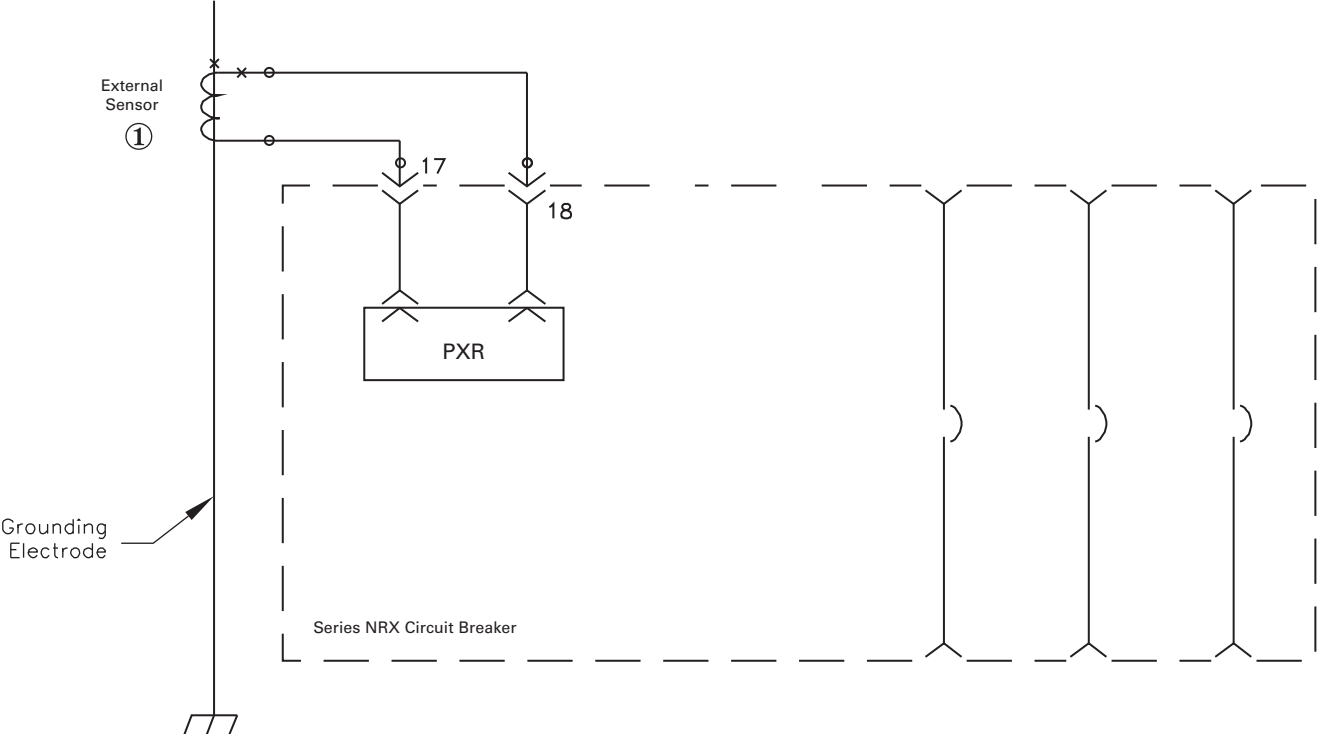
Ground Fault Residual 3-Phase, 4-Wire



Notes:

1. Sensor is customer wired to sense neutral currents. This is required for 3-phase, 4-wire Residual Ground Fault (applicable for trip units having G protection).

Source Ground Fault Sensing



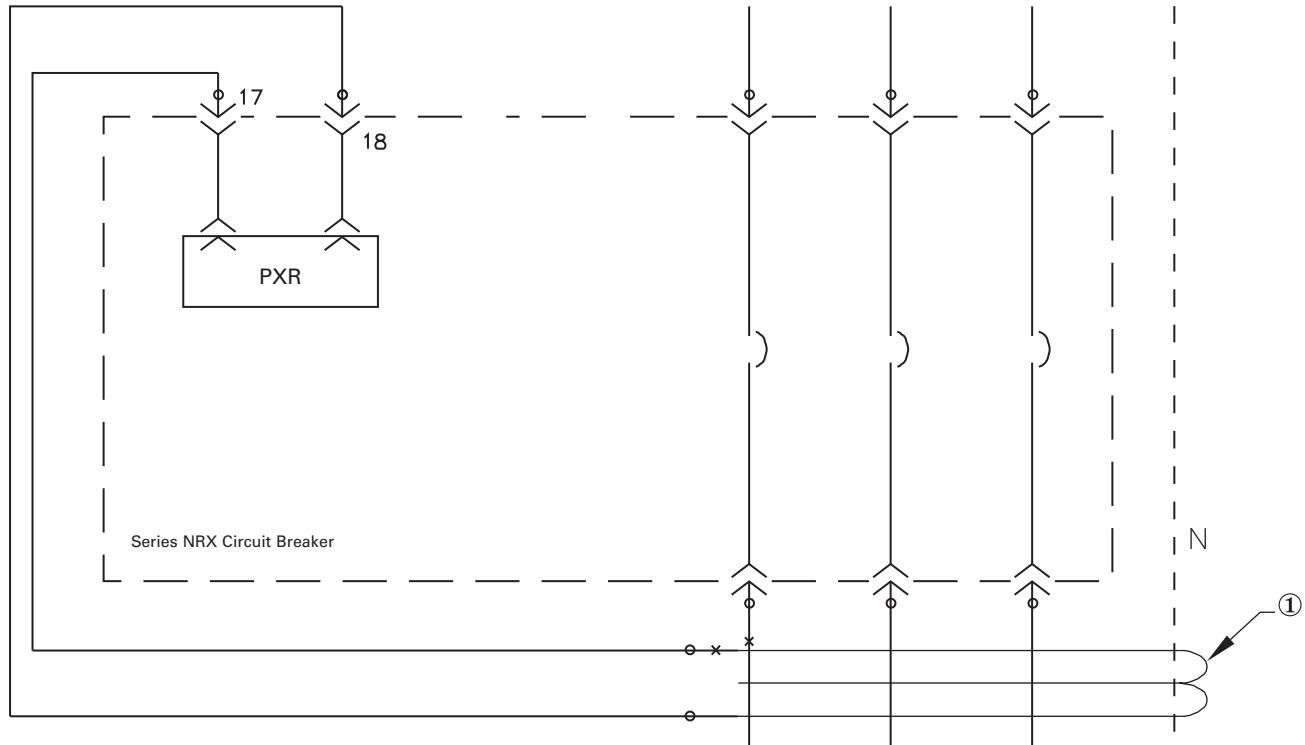
Notes:

1. Sensor NFGFSKIT (IZMX-EFS) is used to sense and detect Ground Fault currents. The Part number is 70C1527G04.

IZMX Series Air Circuit Breakers

Wiring Diagram

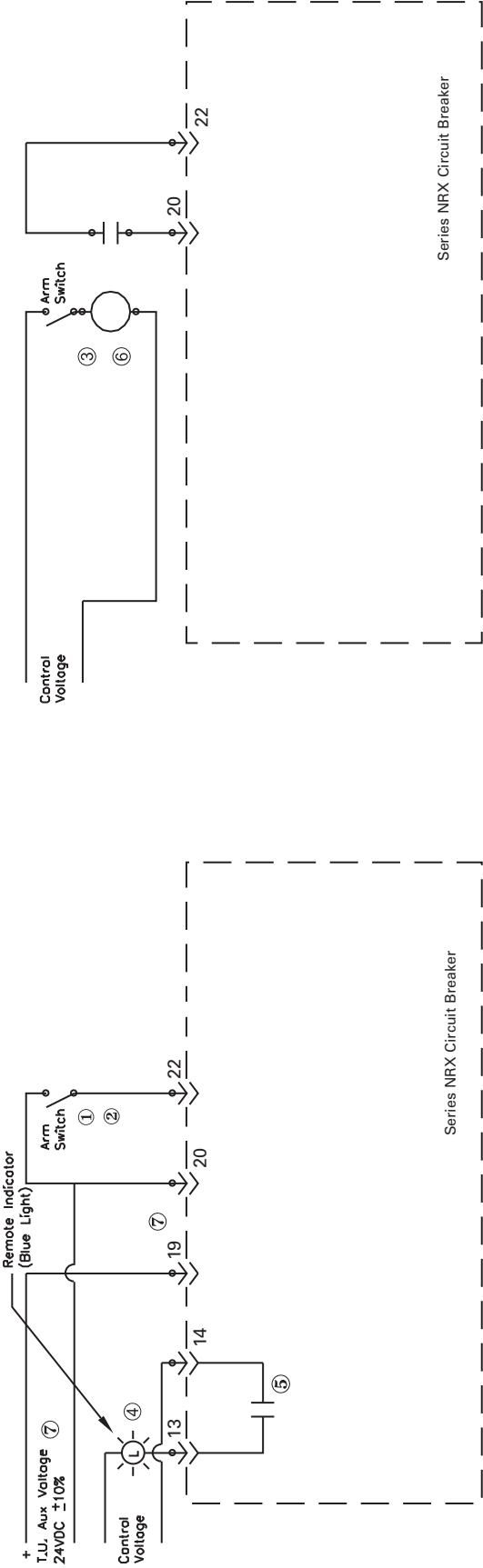
Zero Sequence Ground Fault Sensing



Notes:

1. Sensor NFGFSKIT (IZMX-EFS) is used to sense and detect Ground Fault currents of 3-wire or 4-wire. The Part number is 70C1527G04.

Maintenance Mode Wiring



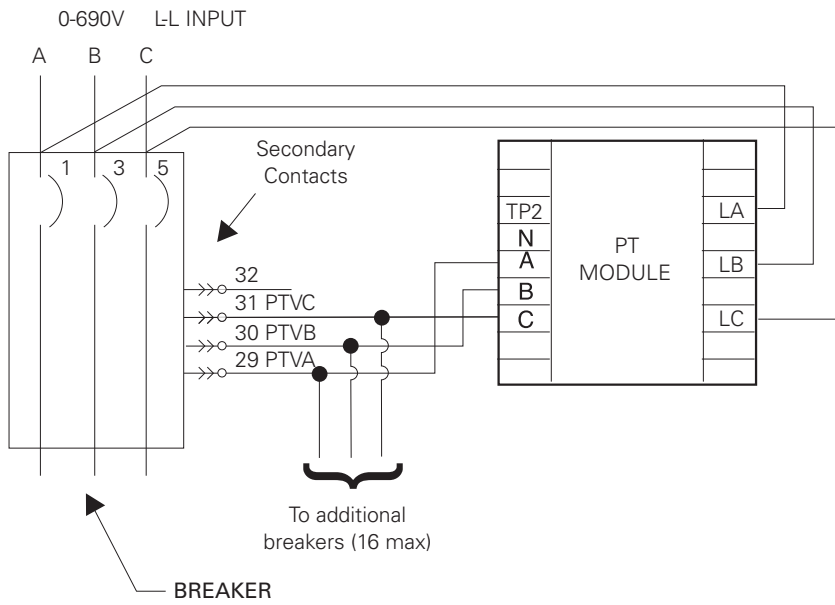
Notes:

1. PXR20/25 can locally be placed in Maintenance Mode via a two position switch located on the trip unit. The function can be armed via a remote switch as shown. In addition, the function can be activated via communication modules. A blue LED on the PXR verifies the PXR release in Maintenance Mode.
2. The recommended selector switch for this low voltage application is Eaton part number 10250T133-2E which includes a contact block rated for logic level and corrosive use.
3. The maximum length of this wiring to remotely arm the switch (or alternate relay contact) is 9.78 feet (3 m). Use #20 AWG wire or larger.
4. A remote Stack Light Annunciator panel or other remote indication device can be connected to verify that PXR is in the Maintenance Mode.
5. The relay in the PXR release makes when in Maintenance Mode. Contact is rated 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
6. The PXR release can also be placed remotely in its Maintenance Mode via a general purpose relay (ice cube type with logic level contacts) and activated by a remote control switch. A recommended type is IDEC Relay RY22. Choose the voltage as desired.
7. If a Communication Module is used, The Communication Module will require 24 Vdc power and will provide isolated power to the PXR release in the circuit breaker. If a Communication Module is not used, the PXR release that requires auxiliary voltage for alarms which should be fed from a galvanically isolated, 24 Vdc supply.

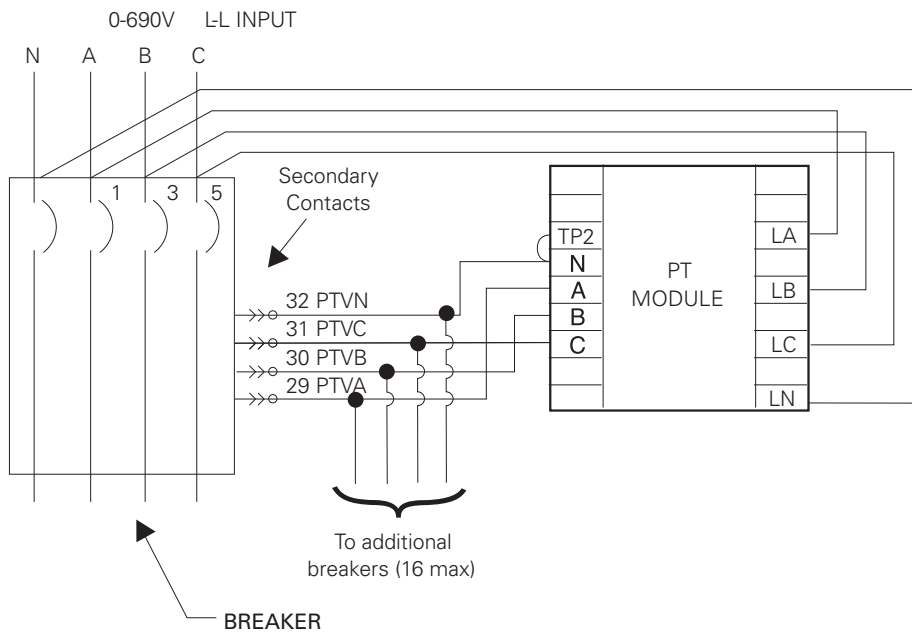
IZMX Series Air Circuit Breakers

Wiring Diagram

External PT Module for PXR25 U type trip unit

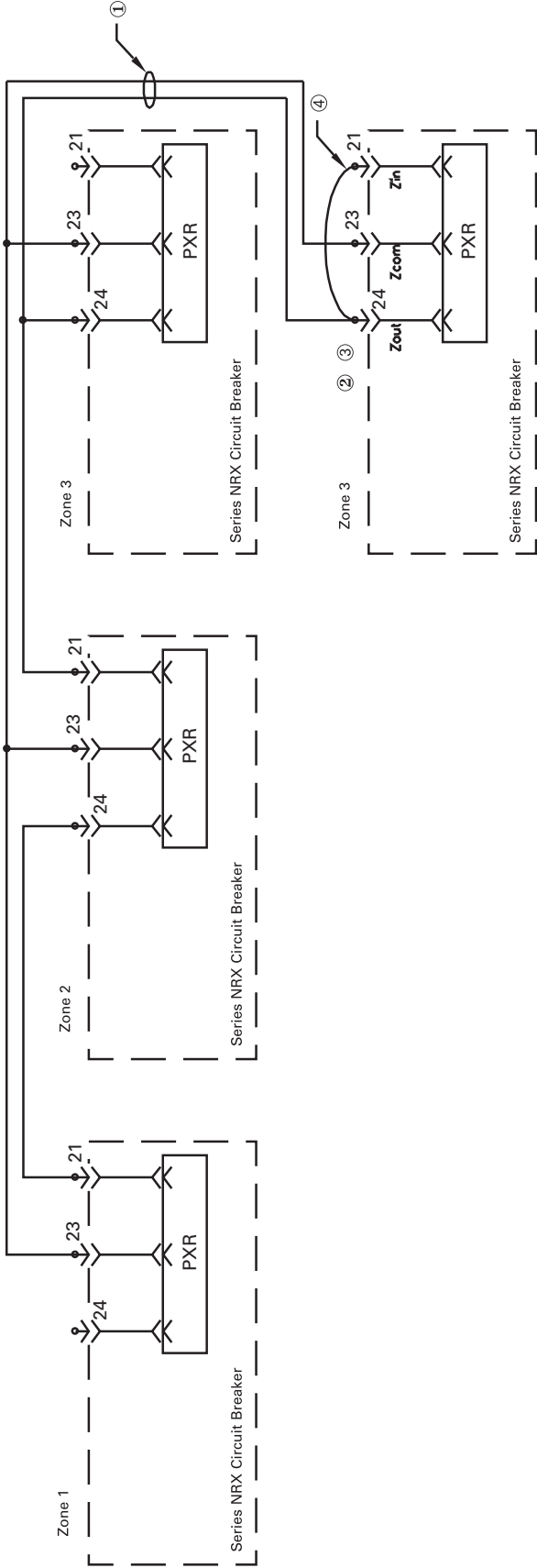


Series NRX Mounted Breakers - 3 pole - 3 wire



Series NRX Mounted Breakers - 3 pole or 4 pole - 4 wire

Zone Interlock Wiring

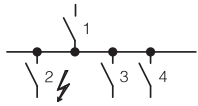


Notes:

1. Twisted together AWG #14 to #20 copper wire. Route the Zone Interlock wiring separate from power conductors. DO NOT GROUND any Zone Interlock wiring.
2. The maximum distance between two farthest breakers on different zones (from the Z_{out} downstream to the Z_{in} upstream terminals) is 250 feet (75 m).
3. A maximum of 20 breakers may be contained in parallel in one zone.
4. Provide a self interlocking jumper (on Zone 3), if coordination is desired with other downstream breakers not providing the Zone Interlock feature.

IZMX Series Air Circuit Breakers

Selectivity



- I_n Rated operational current
- I_u Rated uninterrupted current
- I_{cu} Rated short-circuit breaking capacity
- I_i Set value non-delayed short-circuit releases

Selectivity 415 V AC

Selectivity exists between incoming circuit-breaker 1 and outgoing Circuit Breaker 2 if, only outgoing breaker 2 trips at position 2 - during a short-circuit. System sections 3 and 4 remain operational.

Selection:

Provided that the short-circuit current does not exceed those - values specified ($I_{cc\ eff}$)
 These details represent the limits of selectivity.
 Both Circuit Breakers will switch off with higher short-circuit-currents.
 On IZMX Circuit Breakers with V, P releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4). The I_i setting of IZMX breaker should be on OFF to allow on any short circuit level a time delayed tripping.

Incoming circuit breaker (1)		IZMX16...-V..., IZMX16...-U...															
	I_n [A]	630	630	630	800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	
	I_{cu} [KA]	42	50	65	42	50	65	42	50	65	42	50	65	42	50	65	
	I_i [A]max.	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Outgoing circuit breaker (2)	I_u [A]	I_{cu} [KA]	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H
	Selectivity - limit current I_s (kA)																
NZMB(C)(N) (H)1-A(M)...	20	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
160	25-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
NZMB(C)(N) (H)2-A(M) (V)...	20	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	25	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	90	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	140	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	160	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	200	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	220	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
250	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
300	25-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
NZMC(N)(H) 3-A(M)(V)...	220	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	250	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	320	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	350	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	400	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	450	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	500	36-150	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	630	36-150	-	-	-	T	T	T	T	T	T	T	T	T	T	T	T
	NZMN(H) 4-A(M)(V)...	550	50-100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
630		50-100	-	-	-	T	T	T	T	T	T	T	T	T	T	T	
800		50-100	-	-	-	-	-	-	T	T	T	T	T	T	T	T	
875		50-100	-	-	-	-	-	-	T	T	T	T	T	T	T	T	
1000		50-100	-	-	-	-	-	-	-	-	T	T	T	T	T		
1250		50-100	-	-	-	-	-	-	-	-	-	-	-	T	T		
1400		50-100	-	-	-	-	-	-	-	-	-	-	-	T	T		
1600	50-100	-	-	-	-	-	-	-	-	-	-	-	-	-			

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

IZMX40...-V..., IZMX40...-U...																							
800	800	800	1000	1000	1000	1250	1250	1250	1600	1600	1600	2000	2000	2000	2500	2500	2500	3200	3200	3200	4000	4000	4000
66	85	105	66	85	105	66	85	105	66	85	105	66	85	105	66	85	105	66	85	105	66	85	105
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H	B	N	H

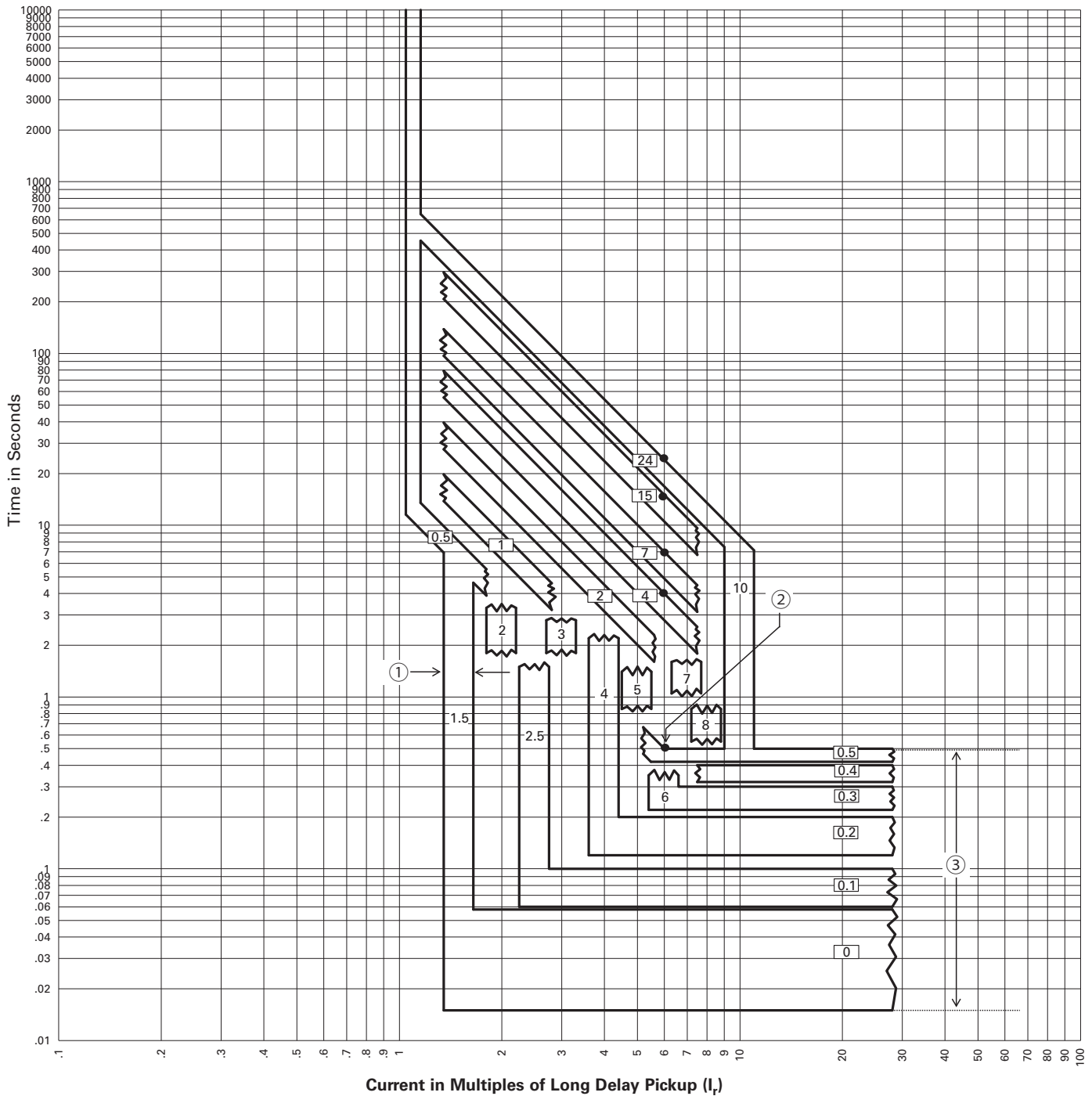
Selectivity - limit current Is (kA)

T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
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T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	T	T	T	T	T	T	T	T	T	T
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T	T	T	T	T	T	T	T	T

IZMX Series Air Circuit Breakers

Tripping Characteristics

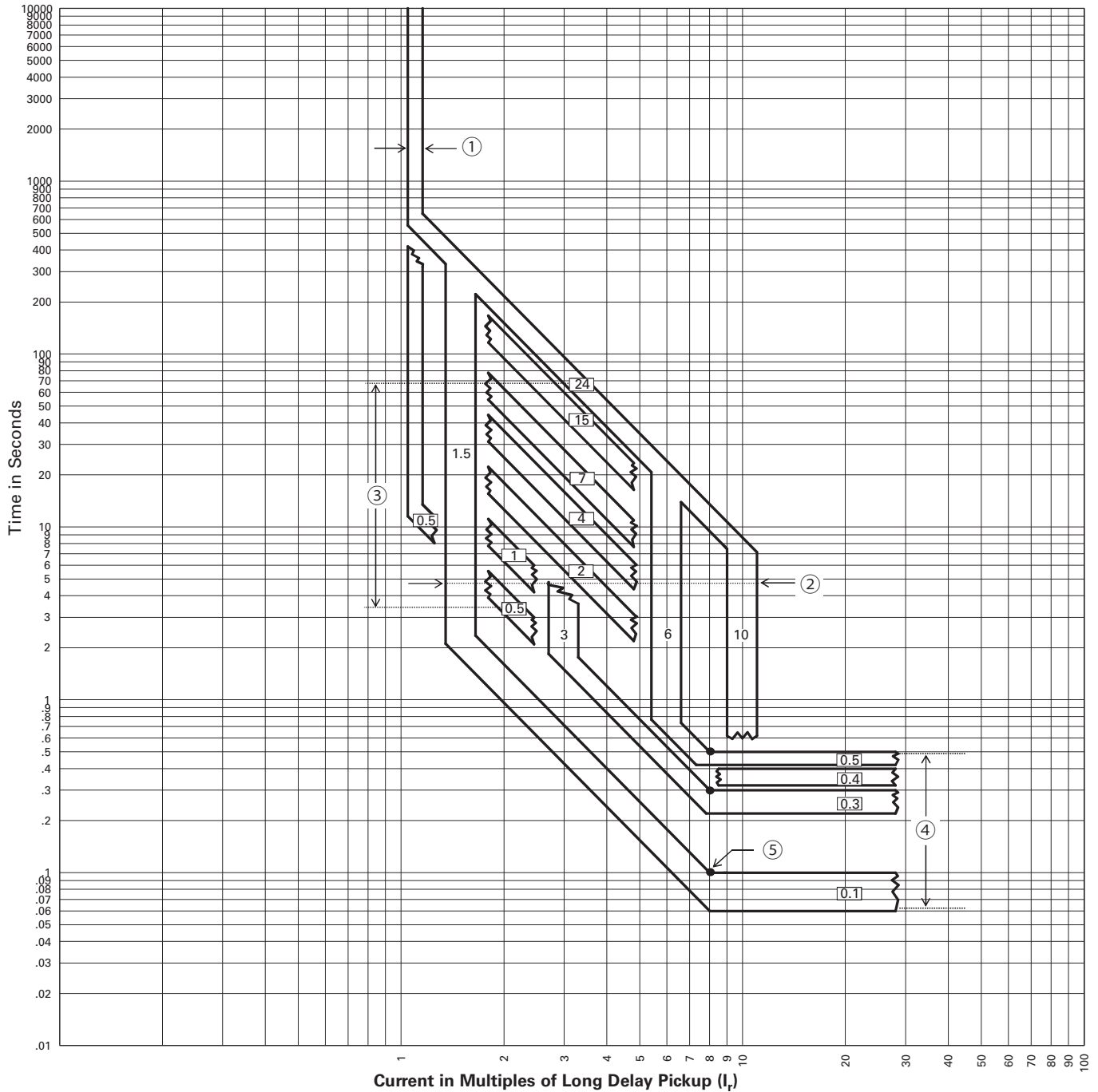
IZMX16(40)...V(U)... PXR20/25 Long Delay(L) and Short Delay(S) Curves L-Protection: I²t-Characteristic curve and S-Protection: Flat characteristic curve



Notes:

1. Short slope: Flat, the actual pickup point has 100% ± 10% tolerance.
2. Long delay I²t slopes flattens out at 6x of I_p.
3. Short time delay from 0(50ms) to 0.5s, with +0 / -80ms tolerance except 0.1s and 0s setting
0.1s setting, trip time is 0.06s to 0.1s
0s setting, nominal clear time is 60ms with auxiliary power and 120ms without.
4. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
5. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
6. This curve is for 50Hz, 60Hz applications.
7. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current

IZMX16(40)...V(U)... PXR20/25 Long Delay(L) and Short Delay(S) Curves
S-Protection with: I²t-Characteristic curve ON



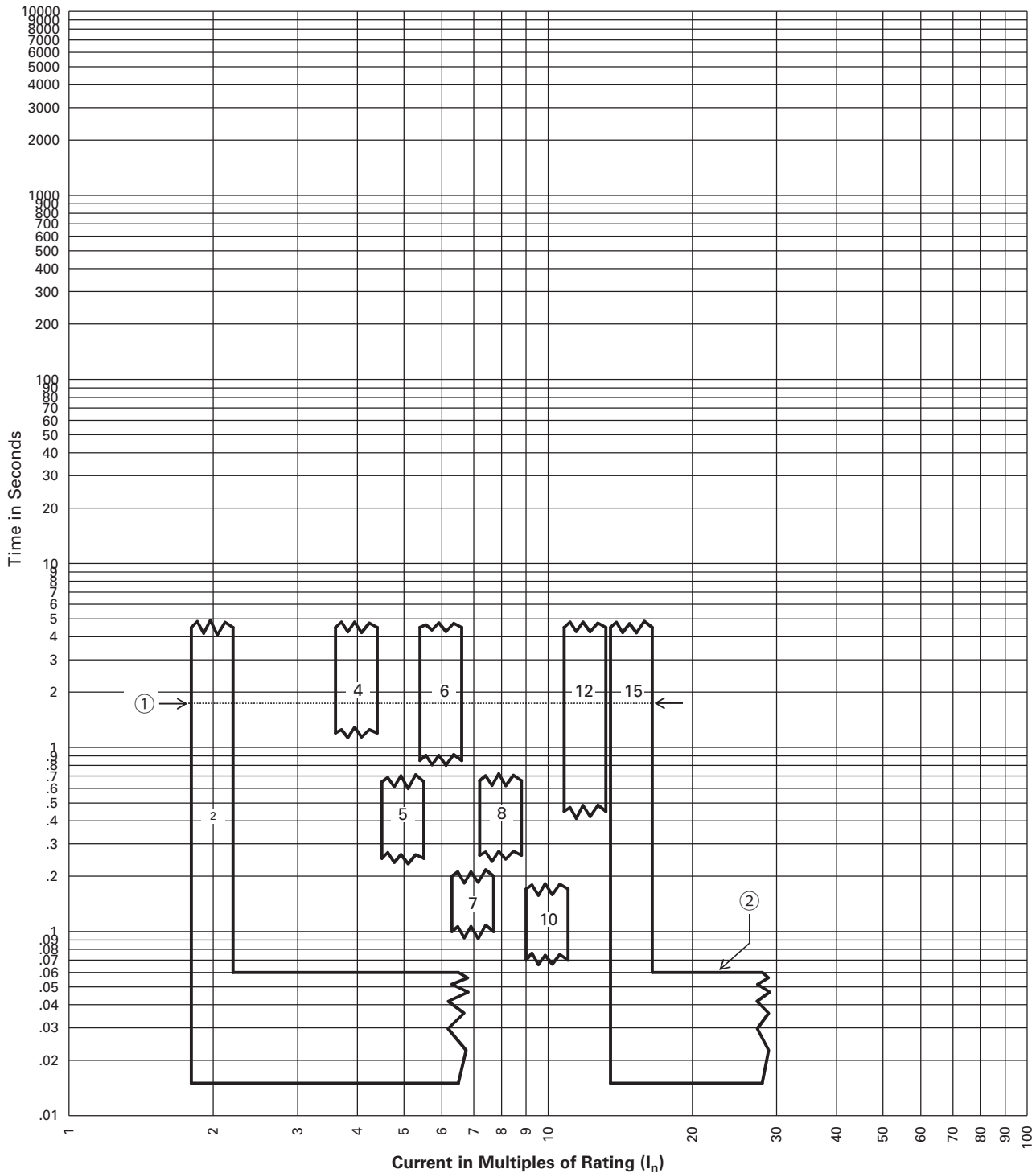
Notes:

1. This curve shown as a multiple of the LONG PU setting(I_r). The actual pickup point occurs at 110% of the I_r, with ± 5% tolerance.
2. SDPU = 1.5x to 10x of I_r, have 100% ± 10% tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I²T. The short pickup points have ± 10% tolerance.
time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s.
tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I²T slopes flattens out at 8x of I_r for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I²T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions.

IZMX Series Air Circuit Breakers

Tripping Characteristics

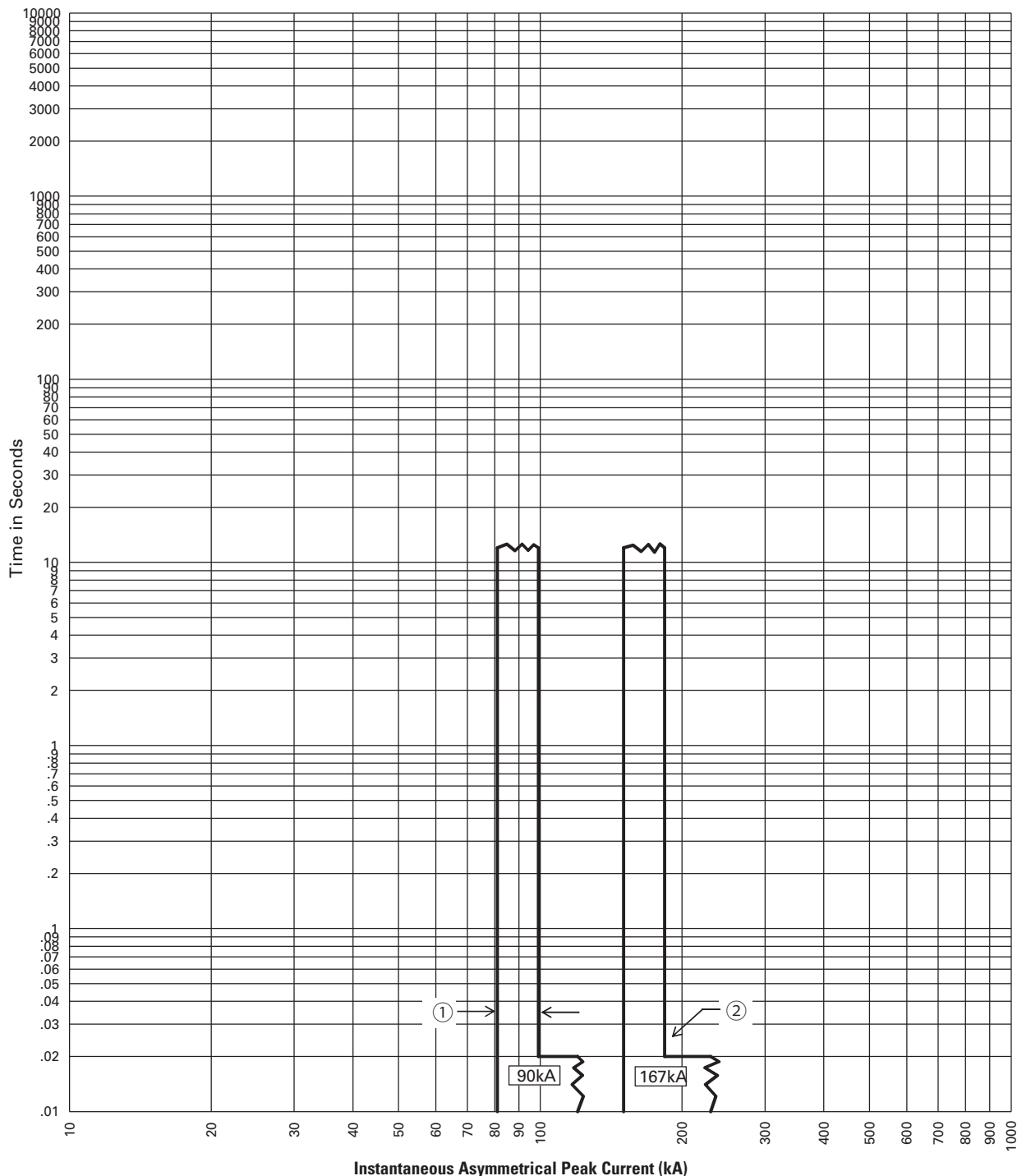
IZMX16(40)...V(U)... PXR20/25 Instantaneous(I) Curves I-Protection: Adjustable



Notes:

1. The Instantaneous settings have conventional $100\% \pm 10\%$ as the pickup points.
2. The nominal Instantaneous trip time is 60ms with auxiliary power supply and 100ms without.
3. Instantaneous protection could be disabled by setting Instantaneous PU switch to OFF position.
4. The curve is shown as a multiple of the Current Rating (I_n).
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to $+50^{\circ}\text{C}$ ambient. Temperatures above $+85^{\circ}\text{C}$ will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX16(40)...V(U)... PXR20/25 Instantaneous(I) Curves Instantaneous Trip at High Fault Currents



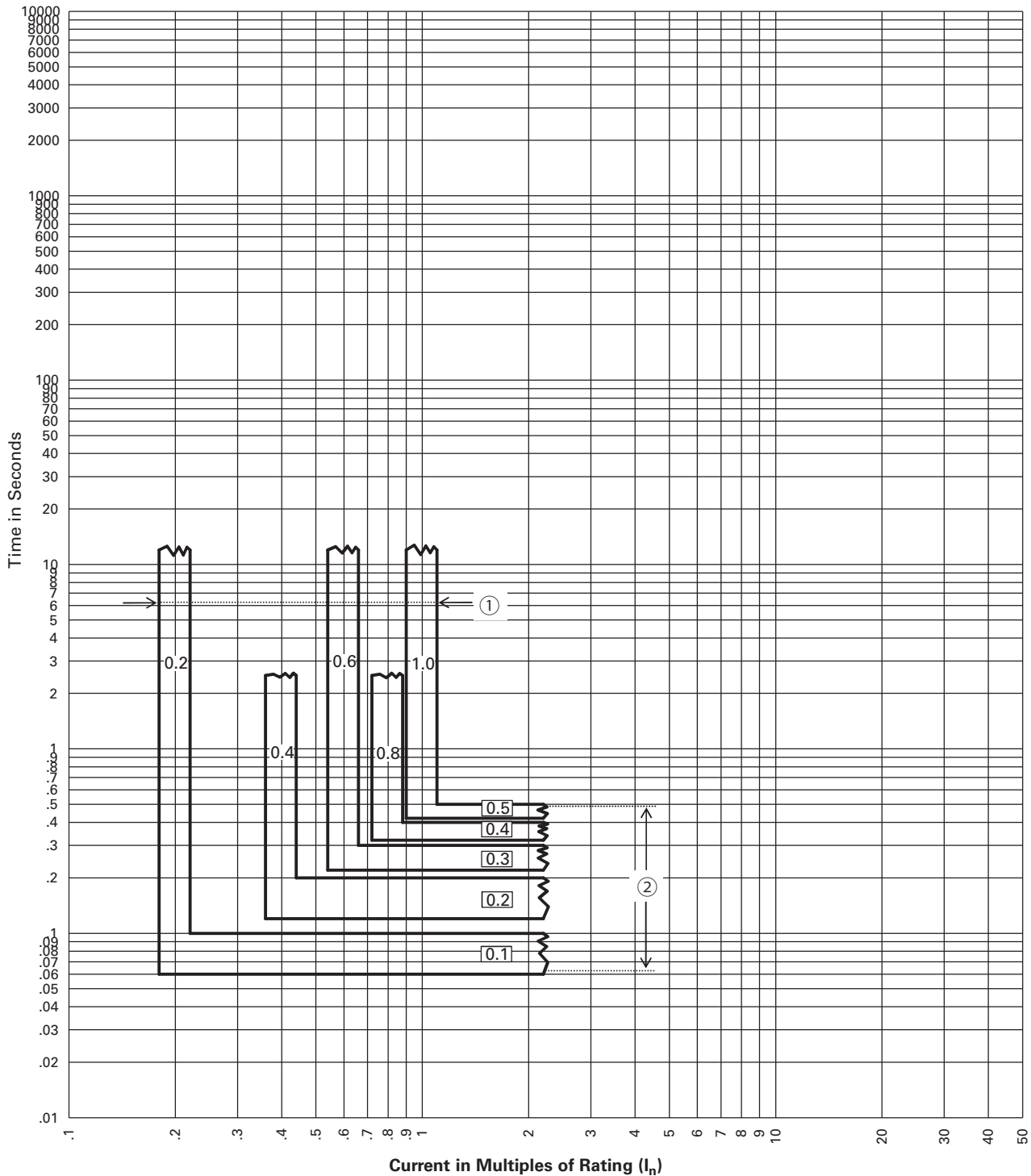
Notes:

1. Fixed High Instantaneous Trip function is provided in the circuit breaker for Series NRX - Type NF(IZMX16) set to pickup at 90kA. Instantaneous peak current level. The tolerance is 100% ± 10% as the pickup points.
2. The peak current level setting for NRX - Type RF(IZMX40) is fixed at 167kA.
3. This protection is functional even when the Instantaneous is set to the OFF position.
4. The PXR will light the Instantaneous LED for a High Instantaneous trip.
5. The total Instantaneous clearing times shown are conservative and consider the maximum response times of the trip unit, the circuit breaker opening, and the interruption of the current under factors that contribute to worst case conditions, like: maximum rated voltages, single phase interruption, and minimum power factor. Faster clearing times are possible depending on the specific system conditions, the type of circuit breaker applied, and if any arc reduction settings are employed.

IZMX Series Air Circuit Breakers

Tripping Characteristics

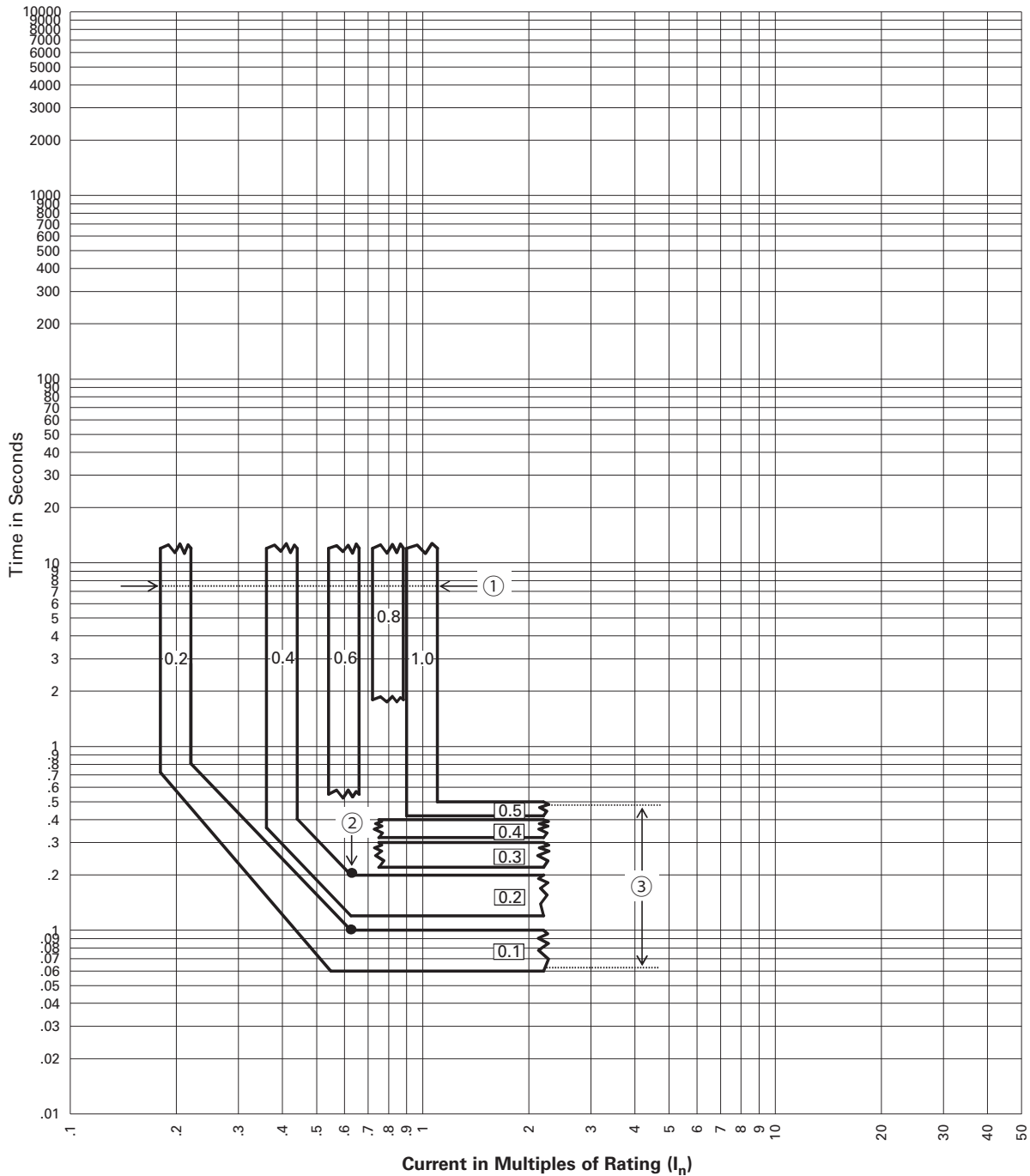
IZMX16(40)...V(U)... PXR20/25 Ground(G) Curves G: Ground fault protection - Flat characteristic curve



Notes:

1. Ground PU setting from 0.2 to 1.0 of I_n with steps of 0.2, have tolerance of 100% \pm 10%.
2. Ground Flat time from 0.1s to 0.5s, with 0.1s increments.
3. Ground slope: Flat, trip time tolerance is +0 / -80ms for all settings except 0.1s setting is 0.06s to 0.1s.
4. The curve is shown as a multiple of the Current Rating (I_n).
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series NRX NF&RF(IZMX16/40) breakers including all frame sizes, ratings, and constructions. The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX16(40)...V(U)... PXR20/25 Ground(G) Curves
G: Ground fault protection- I^2t -Characteristic curve ON



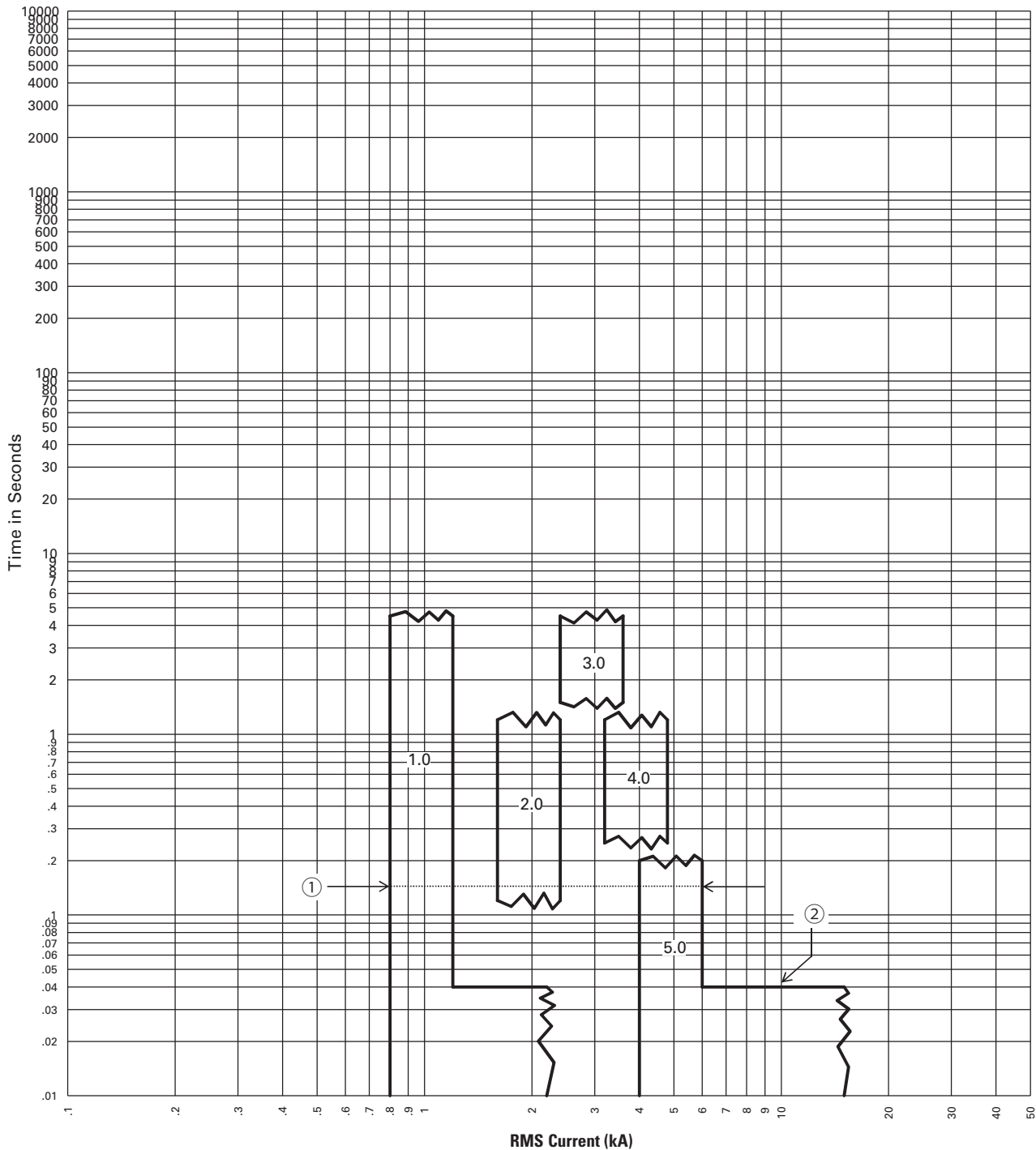
Notes:

1. Ground PU setting from 0.2 to 1.0 of I_n with steps of 0.2, have tolerance of $100\% \pm 10\%$.
2. Beak points at $0.625 \times I_n$ to flat.
3. Ground I^2T time from 0.1s to 0.5s, with 0.1s increments.
4. Ground slope: Flat, trip time tolerance is $+0 / -80\text{ms}$ for all settings except 0.1s setting is 0.06s to 0.1s.
Ground slope: I^2T , tolerance is
0.1s, 0.2s : $+0 / -40\%$
0.3s, 0.4s, 0.5s : $+0 / -30\%$
5. The curve is shown as a multiple of the Current Rating (I_n).
6. The end of the curve is determined by the interrupting rating of the circuit breaker.
7. Curves applies from -20°C to $+50^\circ \text{C}$ ambient. Temperatures above $+85^\circ \text{C}$ will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions. The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX Series Air Circuit Breakers

Tripping Characteristics

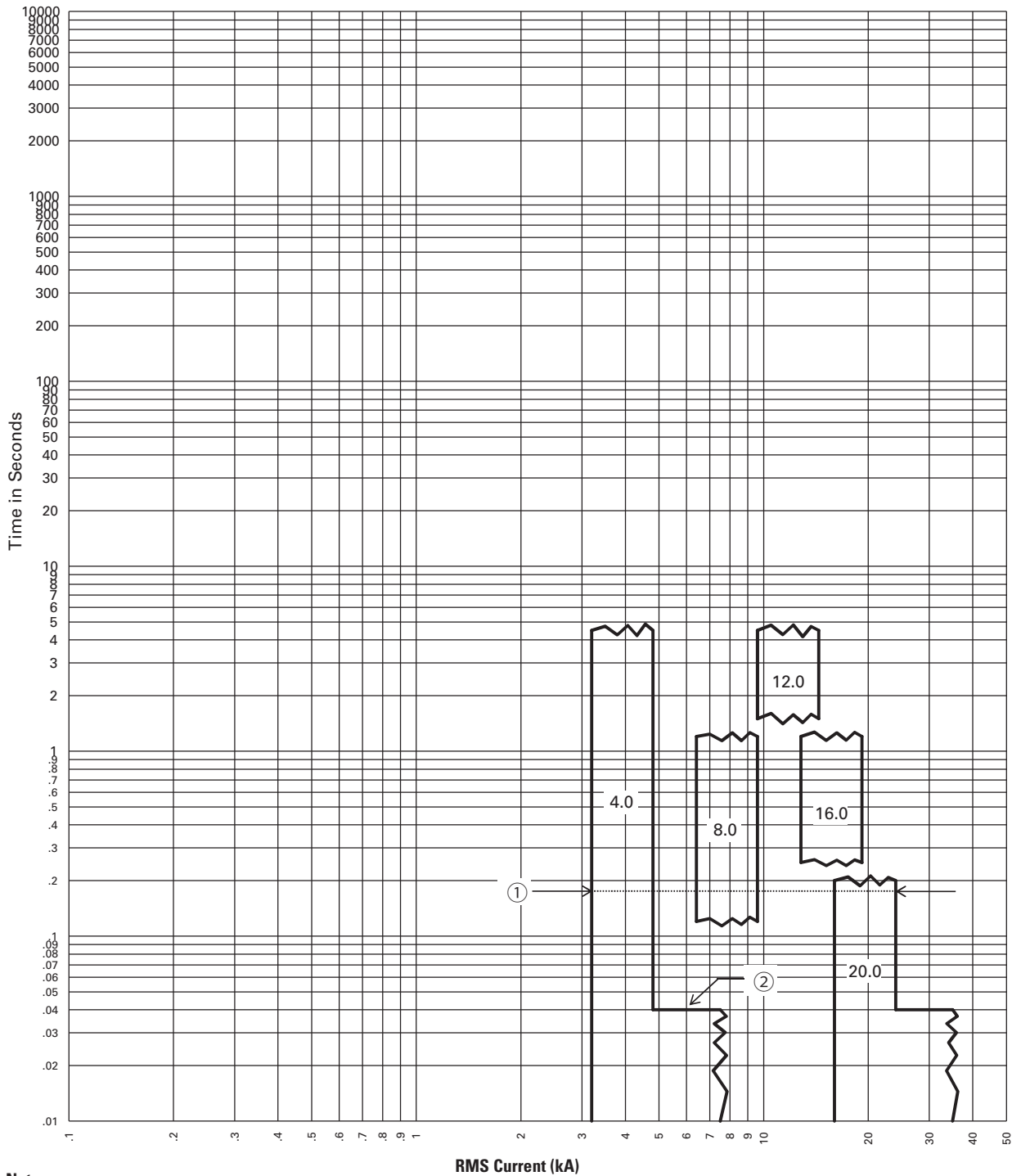
IZMX16...V(U)... PXR20/25 Maintenance Mode Curve Arc-flash Reduction Maintenance Mode for IZMX16 up to 1600A



Notes:

1. Nominal reduction values have a tolerance of $\pm 20\%$.
2. The nominal ARMs trip time is 40ms with auxiliary power supply.
3. The Maintenance Mode feature must be ENABLED via setting Maintenance Mode switch to ON position remote switch, or communications for these curves to apply.
Maintenance Mode is in use being shown by blue LED.
4. The PXR will light the Instantaneous LED for a Maintenance Mode Trip.
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to $+50^{\circ}\text{C}$ ambient. Temperatures above $+85^{\circ}\text{C}$ will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series NRX NF(IZMX16) circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX40...V(U)... PXR20/25 Maintenance Mode Curve
Arc-flash Reduction Maintenance Mode for IZMX40 up to 4000A



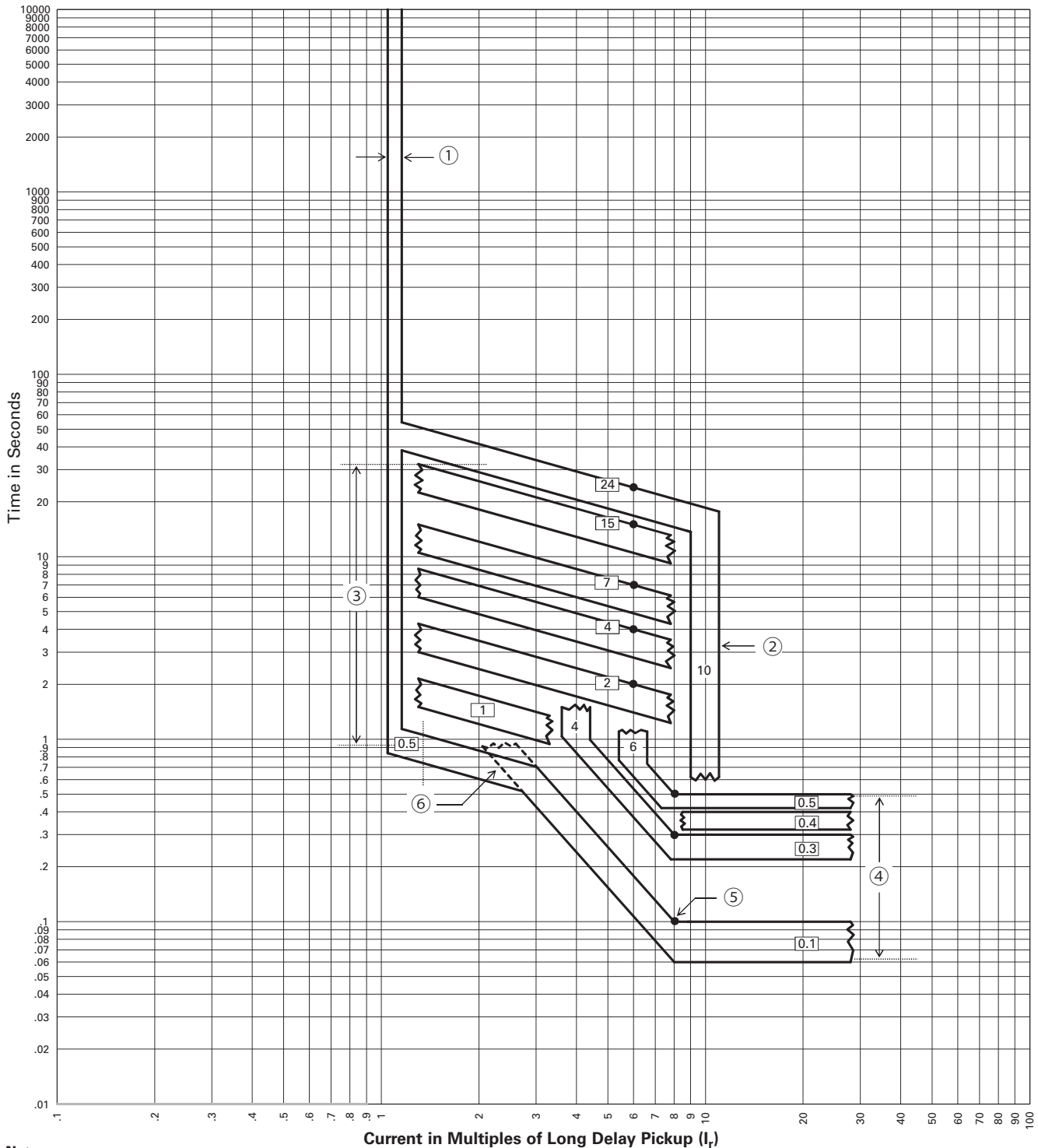
Notes:

1. Nominal reduction values have a tolerance of $\pm 20\%$.
2. The nominal ARMs trip time is 40ms with auxiliary power supply.
3. The Maintenance Mode feature must be ENABLED via setting Maintenance Mode switch to ON position remote switch, or communications for these curves to apply.
Maintenance Mode is in use being shown by blue LED.
4. The PXR will light the Instantaneous LED for a Maintenance Mode Trip.
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to $+50^{\circ}\text{C}$ ambient. Temperatures above $+85^{\circ}\text{C}$ will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series NRX RF(IZMX40) circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX Series Air Circuit Breakers

Tripping Characteristics

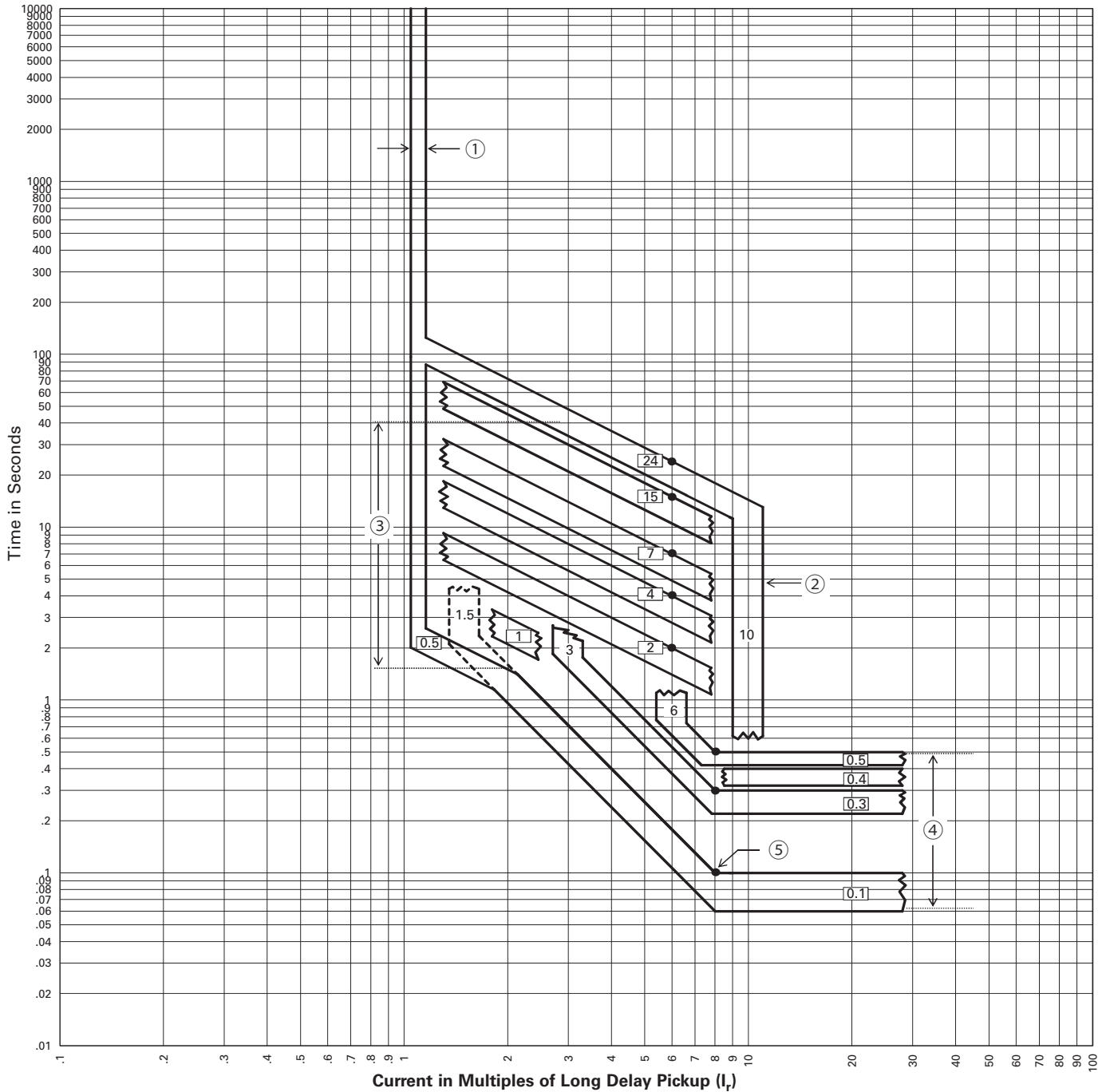
IZMX16(40)...V(U)... PXR20/25 Long Delay(L) Curves L-Protection: $I^{0.5}t$ -Characteristic curve



Notes:

1. This curve shown as a multiple of the LONG PU setting (I_r). The actual pickup point occurs at 110% of the I_r , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_r , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I^2T . The short pickup points have $\pm 10\%$ tolerance. time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s. tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I^2T slopes flattens out at 8x of I_r , for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I^2T line will determine the other break point and shape of the curve.
6. If the short delay time is longer than long delay time, the short delay trip time will follow the long time setting.
7. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
8. Curves applies from -20°C to $+50^\circ\text{C}$ ambient. Temperatures above $+85^\circ\text{C}$ will cause over temperature trip.
9. This curve is for 50Hz, 60Hz applications.
10. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX16(40)...V(U)... PXR20/25 Long Delay(L) Curves
L-Protection: I²t-Characteristic curve



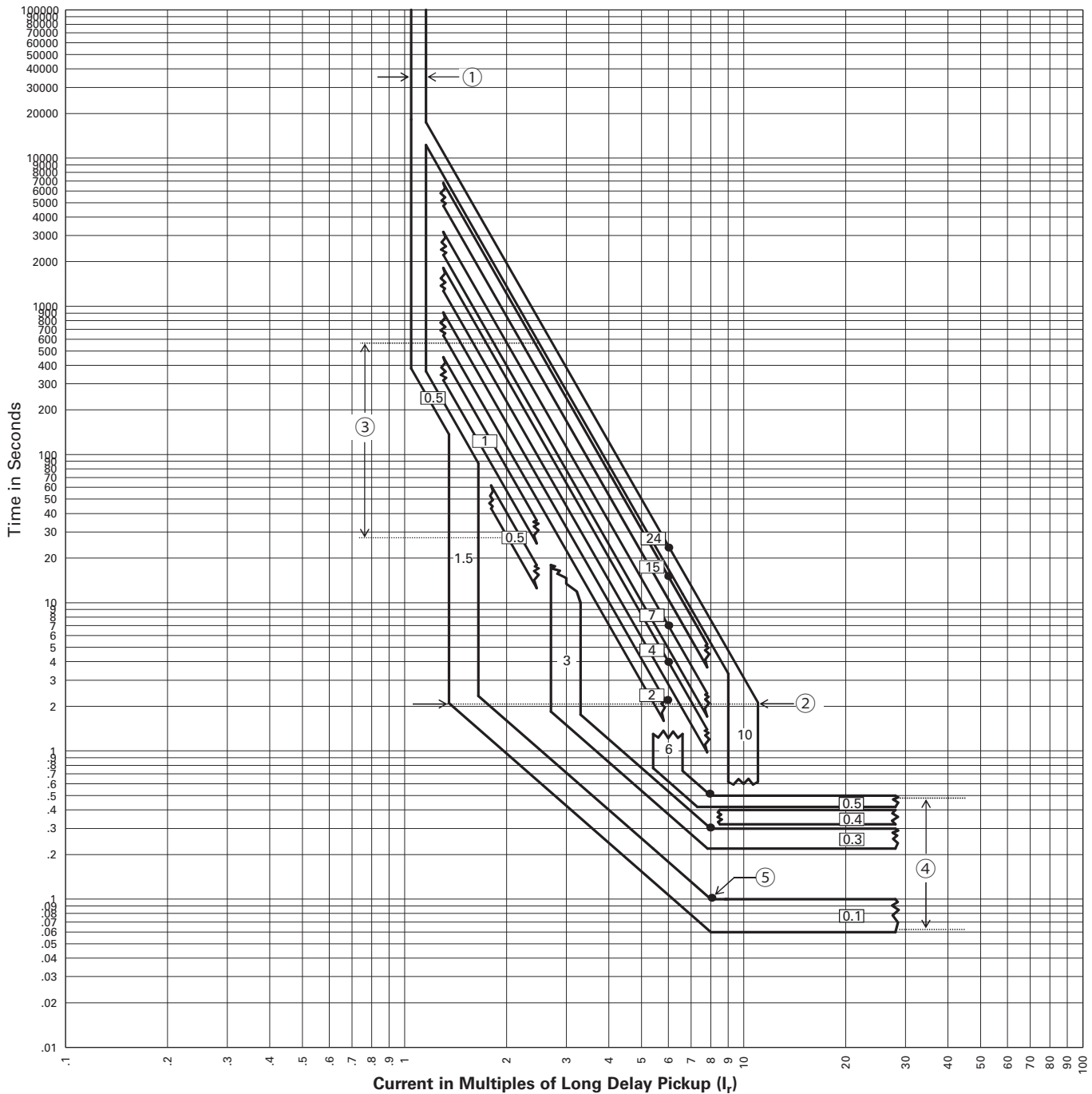
Notes:

1. This curve shown as a multiple of the LONG PU setting(I_r). The actual pickup point occurs at 110% of the I_r, with ± 5% tolerance.
2. SDPU = 1.5x to 10x of I_r, have 100% ± 10% tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I²T. The short pickup points have ± 10% tolerance.
time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s.
tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I²T slopes flattens out at 8x of I_r for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I²T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions.

IZMX Series Air Circuit Breakers

Tripping Characteristics

IZMX16(40)...V(U)... PXR20/25 Long Delay(L) Curves L-Protection: I²t-Characteristic curve



Notes:

1. This curve shown as a multiple of the LONG PU setting(I_r). The actual pickup point occurs at 110% of the I_r , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_r , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I²T. The short pickup points have $\pm 10\%$ tolerance. time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s. tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I²T slopes flattens out at 8x of I_r for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I²T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series NRX NF&RF(IZMX16/40) circuit breakers including all frame sizes, ratings, and constructions. The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZMX-AS22, IZMX-OTS...

			Signalling switch ON-OFF IZMX-AS...	Tripped signalling contact IZMX-OTS...	Latch Check Switch IZMX-LCS...(SR)	Cell switch IZMX-CS...
Rated breaking capacity						
Inductive load						
250 V AC	A	10		10	10	10
125 V DC	A	0.5		0.5	0.5	0.5
250 V DC	A	0.25		0.25	0.25	0.25

IZMX-S...

			Shunt releases				Closing releases			
			IZMX-ST(S)24DC	IZMX-ST(S)48DC	IZMX-ST(S)110AD	IZMX-ST(S)230AD	IZMX-SR24DC	IZMX-SR48DC	IZMX-SR110AD	IZMX-SR230AD
Rated control voltage										
AC 50/60 Hz	U _s	V	–	–	110 - 127	208 - 240	–	–	110 - 127	208 - 240
DC	U _s	V	24	48	110 - 125	208 - 250	24	48	110 - 125	220 - 250
Power consumption										
AC	VA	–	–	–	5 (540 pick-up)	5 (500 pick-up)	–	–	(450 pick-up)	(450 pick-up)
DC	W	5 (500 pick-up)	5 (530 pick-up)	5 (540 pick-up)	5 (515 pick-up)	5 (515 pick-up)	(400 pick-up)	(500 pick-up)	(450 pick-up)	(450 pick-up)
Circuit-breaker response time at U_s	ms	25	25	25	25	25	25	25	25	25
Operating range										
Drop-out voltage										
AC operated, 50/60 Hz, pick-up	Drop-out	x U _c	–	–	–	–	–	–	–	–
Pick-up voltage	Pick-up	x U _c	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1

IZMX-U...

			Undervoltage releases				
			IZMX-UVR24DC	IZMX-UVR48DC	IZMX-UVR110AD	IZMX-UVR220AD	IZMX-UVR400AC
Rated control voltage							
AC 50/60 Hz	U _s	V	–	–	110 - 127	208 - 240	–
DC	U _s	V	24	48	110 - 125	208 - 250	380 - 415
Power consumption							
AC	VA	–	–	–	5 (500 pick-up)	5 (500 pick-up)	5 (500 pick-up)
DC	W	5 (500 pick-up)	5 (500 pick-up)	5 (500 pick-up)	5 (500 pick-up)	5 (500 pick-up)	–
Circuit-breaker response time at U_s	ms	50	50	50	50	50	50
Operating range							
Drop-out voltage							
AC operated, 50/60 Hz, pick-up	Drop-out	x U _c	0.35 - 0.7	0.35 - 0.7	0.35 - 0.7	0.35 - 0.7	0.35 - 0.7
Pick-up voltage	Pick-up	x U _c	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1	0.85 - 1.1

IZMX Series Air Circuit Breakers

Motor Operators

IZMX-M16...

			Motor operators			
			IZMX-M16-24DC	IZMX-M16-48DC	IZMX-M16-110AD	IZMX-M16-230AD
Rated control voltage	U_s	V	24 V DC	48 V DC	110 - 127 V AC 50/60 Hz 110 - 125 V DC	220 - 240 V AC 50/60 Hz 220 - 250 V DC
Necessary time required for charging the spring-operated stored energy mechanism at $1 \times U_s$			4 s	3 s	3 s	4 s
Rated operational current	I_n	A	6 A	3 A	2 A AC 50/60 Hz 1 A DC	1 A AC 50/60 Hz 1 A DC
Starting current		A	20 A	15 A	6 A AC 50/60 Hz 5 A DC	10 A AC 50/60 Hz 10 A DC
Power consumption			160 W	150 W	280 VA AC 50/60 Hz 150 W DC	280 VA AC 50/60 Hz 280 W DC

IZMX-M40...

			Motor operators			
			IZMX-M40-24DC	IZMX-M40-48DC	IZMX-M40-110AD	IZMX-M40-230AD
Rated control voltage	U_s	V	24 V DC	48 V DC	110 - 127 V AC 50/60 Hz 110 - 125 V DC	220 - 240 V AC 50/60 Hz 220 - 250 V DC
Necessary time required for charging the spring-operated stored energy mechanism at $1 \times U_s$ DC			6 s	6 s	6 s	6 s
Rated operational current	I_n	A	7 A DC	3 A DC	3 A AC 50/60 Hz 2 A DC	1.5 A AC 50/60 Hz 1 A DC
Starting current		A	25 A DC	14 A DC	9 A AC 50/60 Hz 5 A DC	5 A AC 50/60 Hz 4 A DC
Power consumption			200 W	175 W	425 VA AC 50/60 Hz 275 W DC	400 VA AC 50/60 Hz 250 W DC

Technical Data

		IZMX-PCAM-2	IZMX-MCAM-2	IZMX-ECAM-2
General				
Dimensions (W x H x D)	mm	24 x 105 x 80	24 x 105 x 80	24 x 105 x 80
Mounting		35mm DIN rail	35mm DIN rail	35mm DIN rail
Protection type		IP20	IP20	IP20
Power supply	V DC	24 V DC	24 V DC	24 V DC
LED display		Status	Status	Status
		SF	Transmit	
		BF	Receive	
Network				
Ethernet		–	–	RJ45, socket
PROFIBUS		SUB-D 9 pole, socket	–	–
Modbus		–	Plug-in screw terminals	–
Function		Slave	Slave	TCP/IP user
Interfaces		RS485	RS485	Ethernet
Protocol		PROFIBUS DP	Modbus-RTU	Modbus TCP, http(s), SMTP
Baud Rates		automatic search up to 12 MBit/s	1200/4800/9600/19200 Bit/s, adjustable via Digitrip	automatic search up to 100 MBit/s
Bus terminating resistors		In plug as required	120 Ω external	–
Bus addresses		1 - 127, can be set via Digitrip	1 - 247, can be set via Digitrip	IP, can be set via Digitrip
Maximum distance		2.4 km	1.2 km	100 m
Supported functions		Cyclical data transfer	Function: 03 = read register 04 = read word variables 08 = connection test 16 = write register	Webserver on board

IZMX Series Air Circuit Breakers

Temperature and Altitude Derating Factors

Temperature Derating

IZMX16

Rated Current	630A	800A	1000A	1250A	1600A
40°C [A]	630	800	1000	1250	1600
50°C [A]	630	800	1000	1250	1500
60°C [A]	630	800	1000	1250	1400
70°C [A]	630	800	1000	1250	1350

IZMX40

Rated Current	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A
40°C [A]	800	1000	1250	1600	2000	2500	3200	4000
50°C [A]	800	1000	1250	1600	2000	2500	3200	4000 ¹⁾
60°C [A]	800	1000	1250	1600	2000	2500	3200	3650 ¹⁾
70°C [A]	800	1000	1250	1600	2000	2280	3200	3500 ¹⁾

¹⁾ Rated continuous current stated applies only with 4 × 120 × 10mm vertical terminal rails painted black.

The values are reduced by 100A each with 4 × 100 × 10mm

Altitude Derating Factors

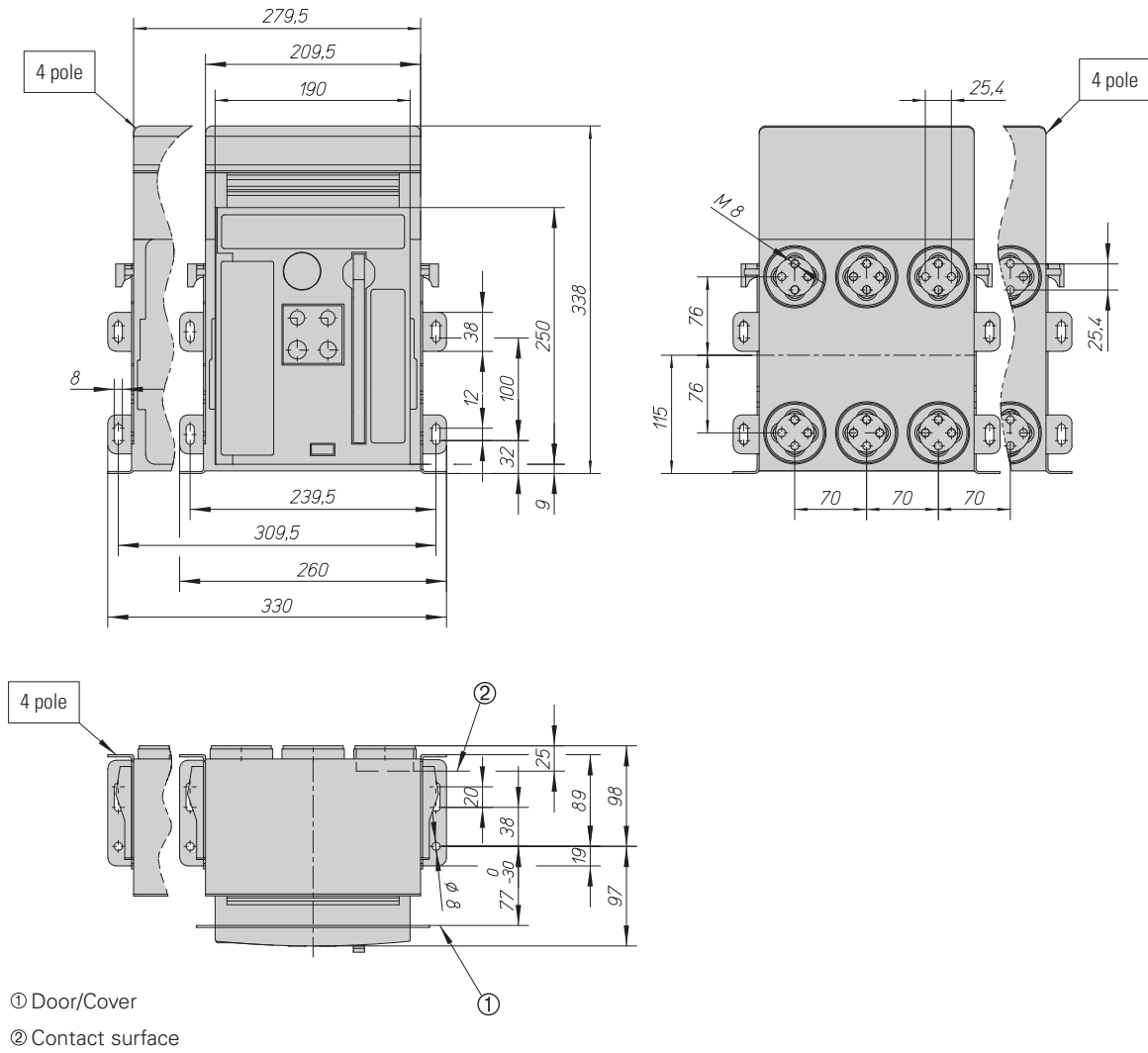
Altitude [m]	Voltage Correction	Current Correction
2000	1.000	1.000
2150	0.989	0.998
2300	0.976	0.995
2450	0.963	0.993
2600	0.950	0.990
2750	0.933	0.987
2900	0.917	0.983
3050	0.900	0.980
3200	0.883	0.977
3350	0.867	0.973
3500	0.850	0.970
3650	0.833	0.967
3800	0.817	0.963
3950	0.800	0.960
5000	0.700	0.940

Notes

Series NRX (IZMX) circuit breakers can be applied at their full voltage and current ratings up to a maximum altitude of 2000 meters above sea level. When installed at higher altitudes, the ratings are subject to correction factors. Short circuit current is not affected as long as the voltage is rated in accordance with the table.

Fixed Mounted

IZMX16...F, INX16...F



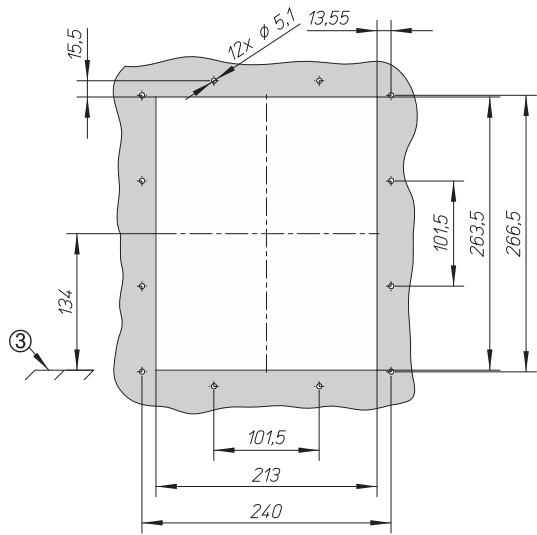
IZMX Series Air Circuit Breakers

Basic Device Dimensions

Fixed Mounted Units

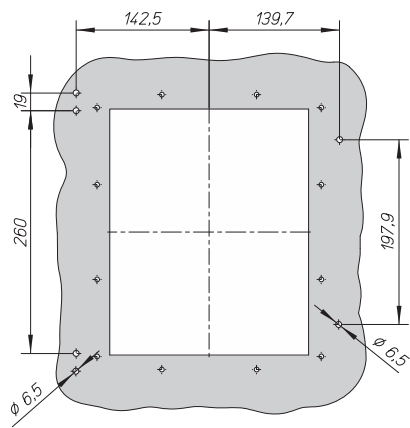
Door cut-out IZMX16

IZMX-DEG16-F



③ Top edge of mounting plate

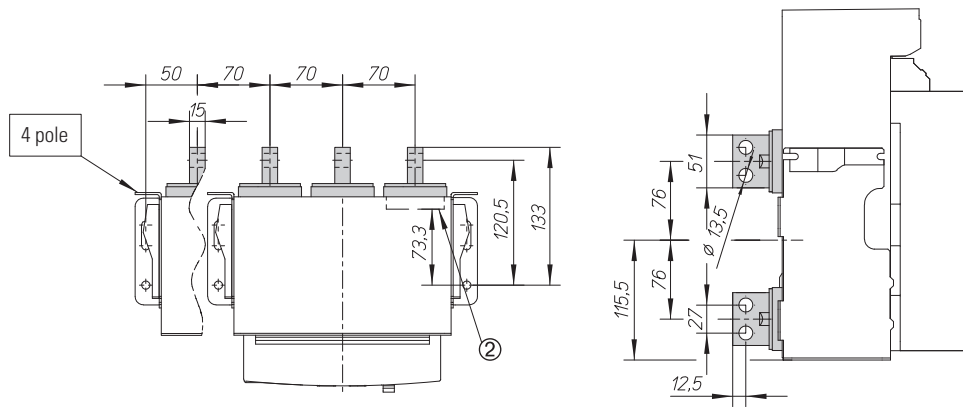
IZMX-DC16-F



Fixed Units

Terminal adapter horizontal/vertical - vertical mounted

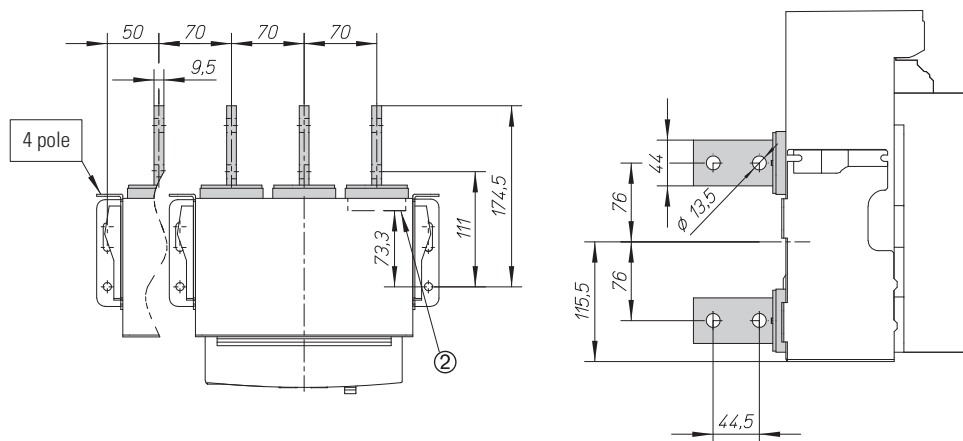
IZMX-THV16...



② Contact surface

Terminal adapter horizontal/vertical long - vertical mounted

IZMX-THVL16...



② Contact surface

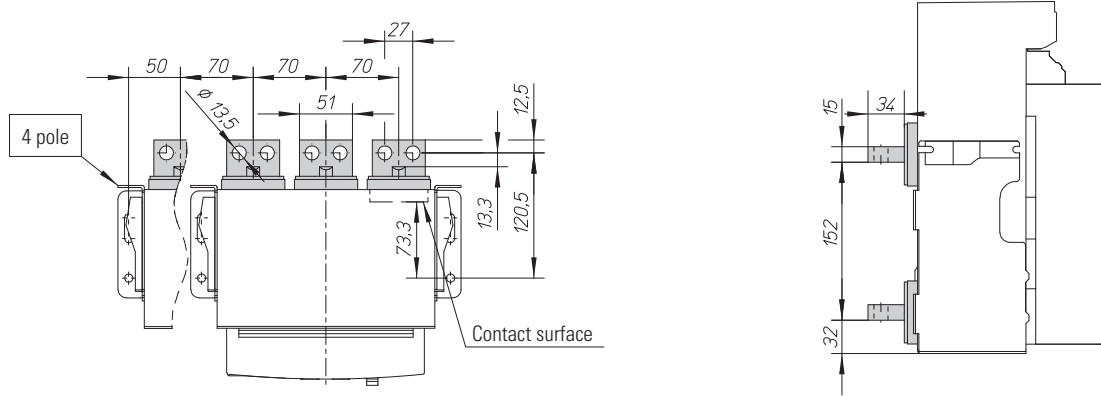
IZMX Series Air Circuit Breakers

Basic Device Dimensions

Fixed Units

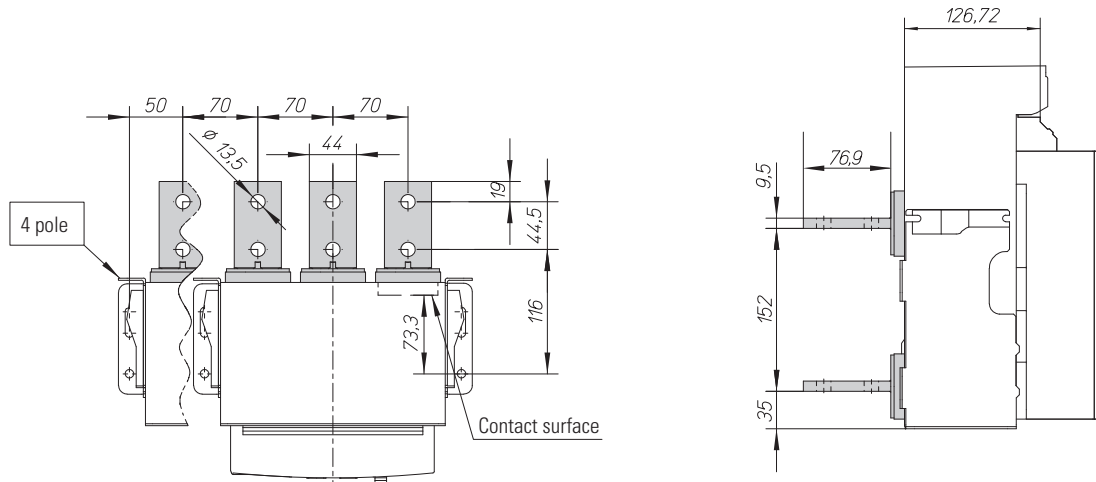
Terminal adapter horizontal/vertical - horizontal mounted

IZMX-THV16...



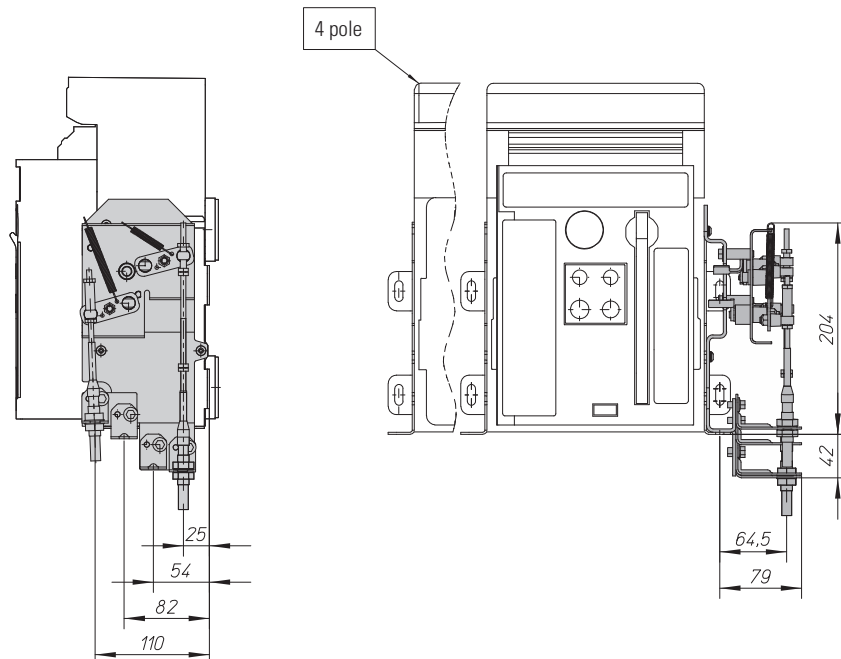
Terminal adapter horizontal/vertical long - horizontal mounted

IZMX-THVL16...



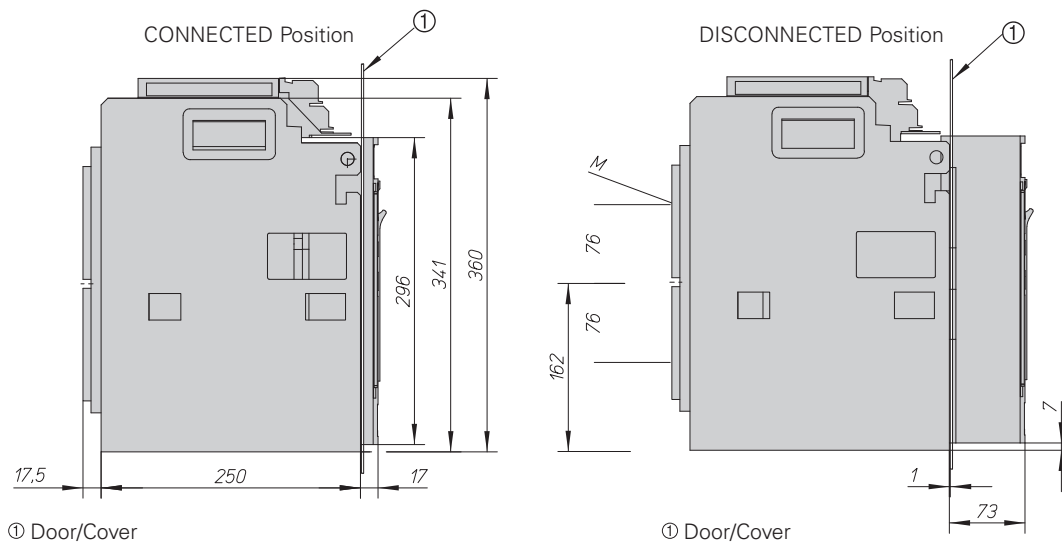
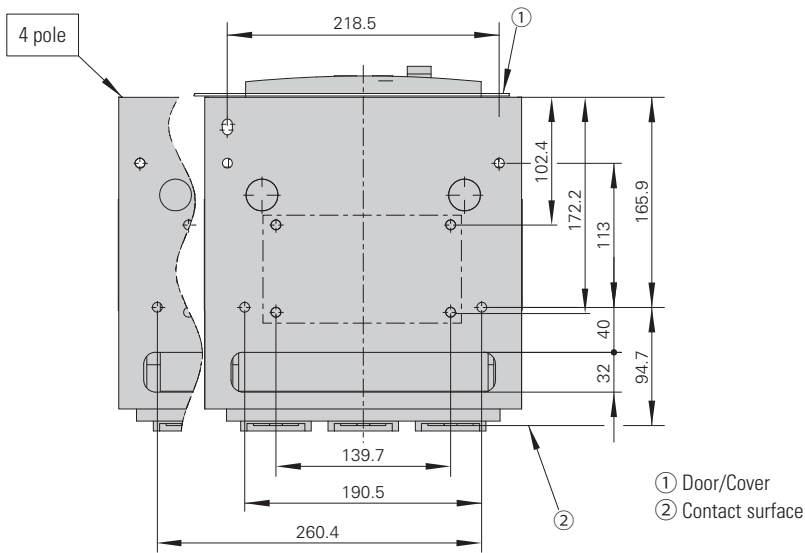
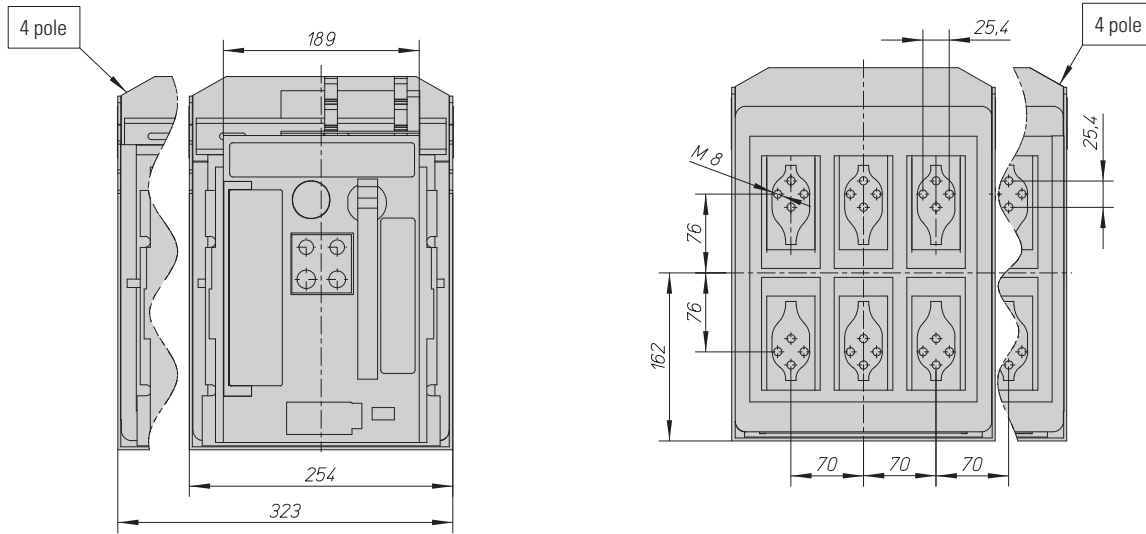
Mechanical interlock for fixed mounting units

IZMX-MIL...F16



Withdrawable Units

IZMX16...W, INX16...W



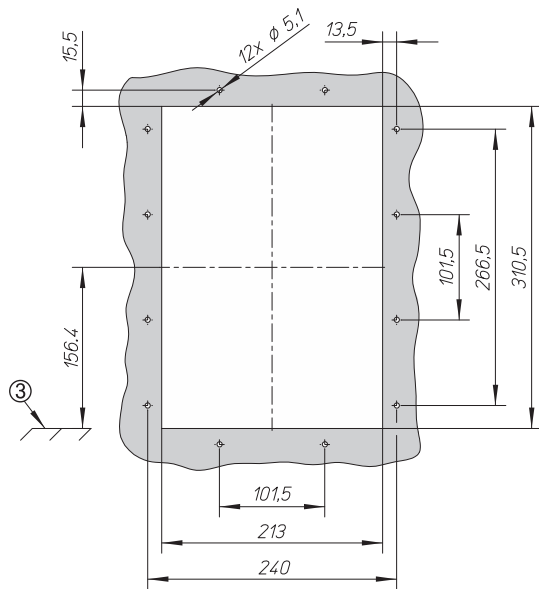
IZMX Series Air Circuit Breakers

Basic Device Dimensions

Withdrawable Units

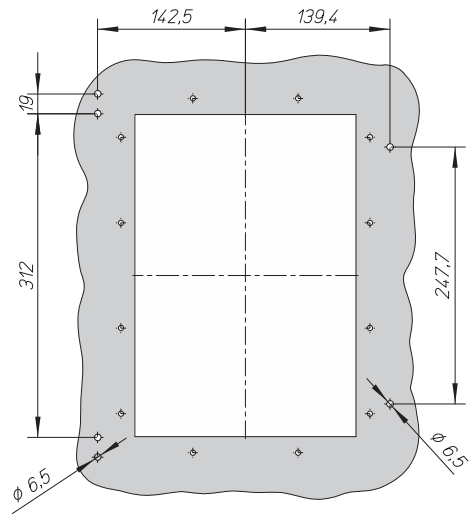
Door cut-out IZMX16

IZMX-DEG16-W



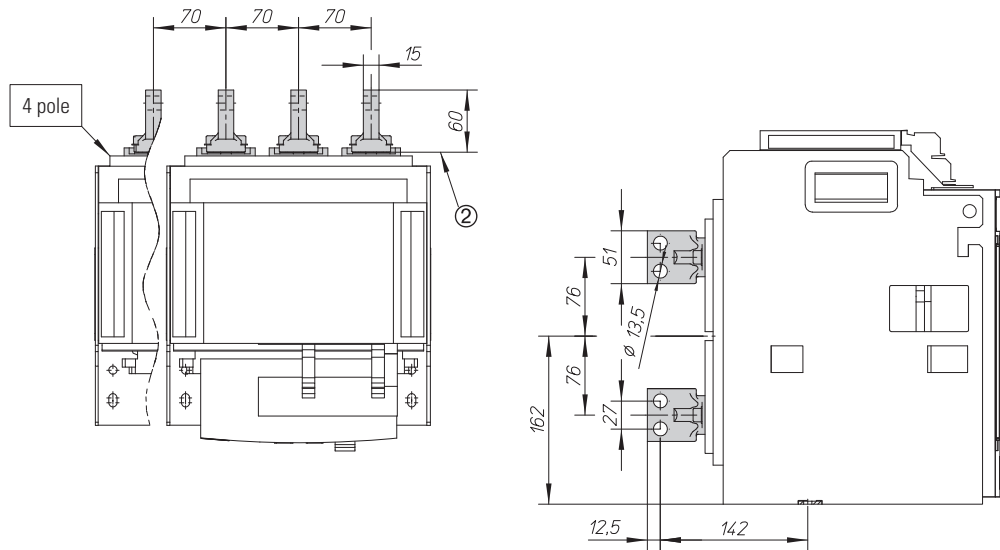
③ Top edge of mounting plate

IZMX-DC16-W

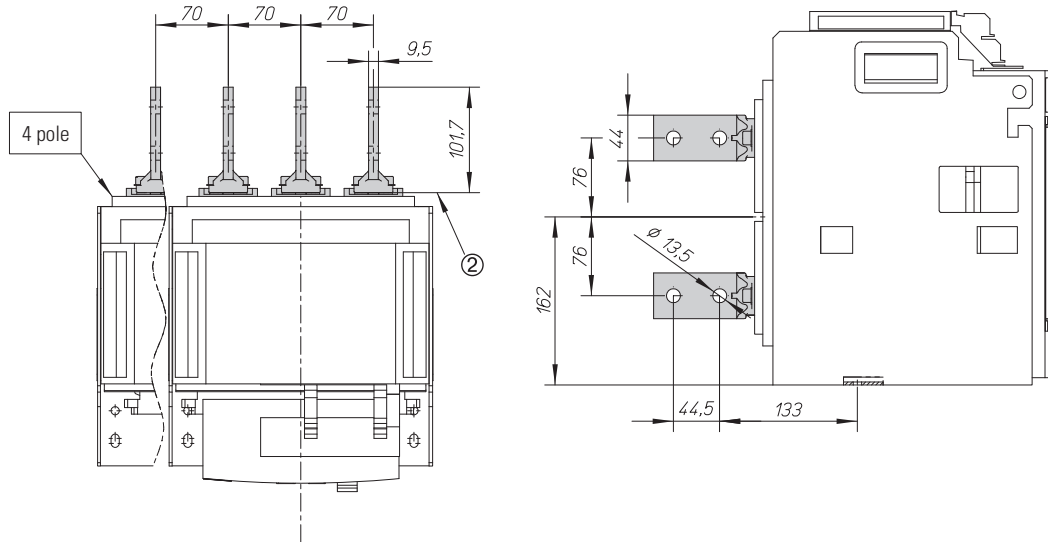


Withdrawable Units

Terminal adapter horizontal/vertical - vertical mounted
IZMX-THV16...



Terminal adapter horizontal/vertical long - vertical mounted
IZMX-THVL16...



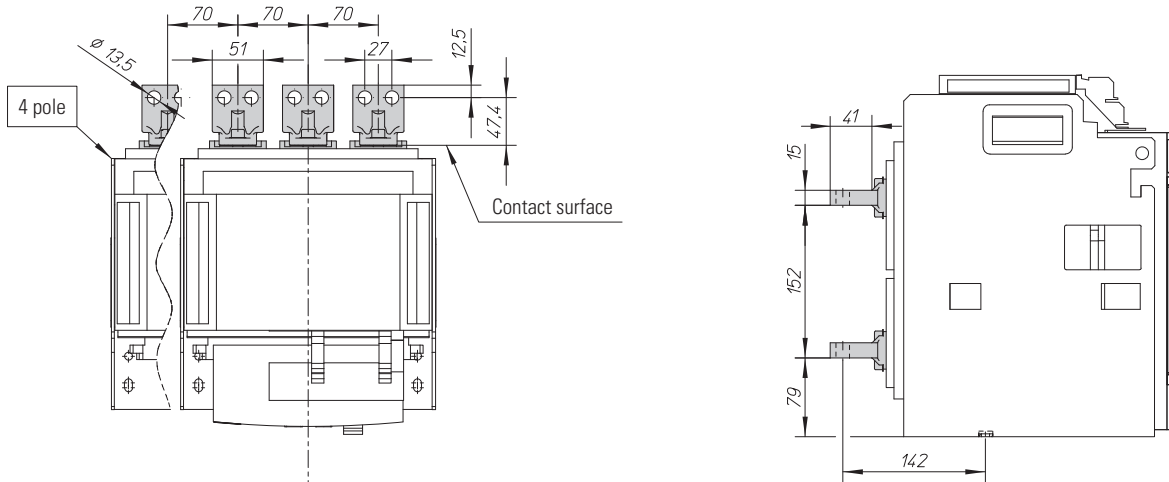
IZMX Series Air Circuit Breakers

Basic Device Dimensions

Withdrawable Units

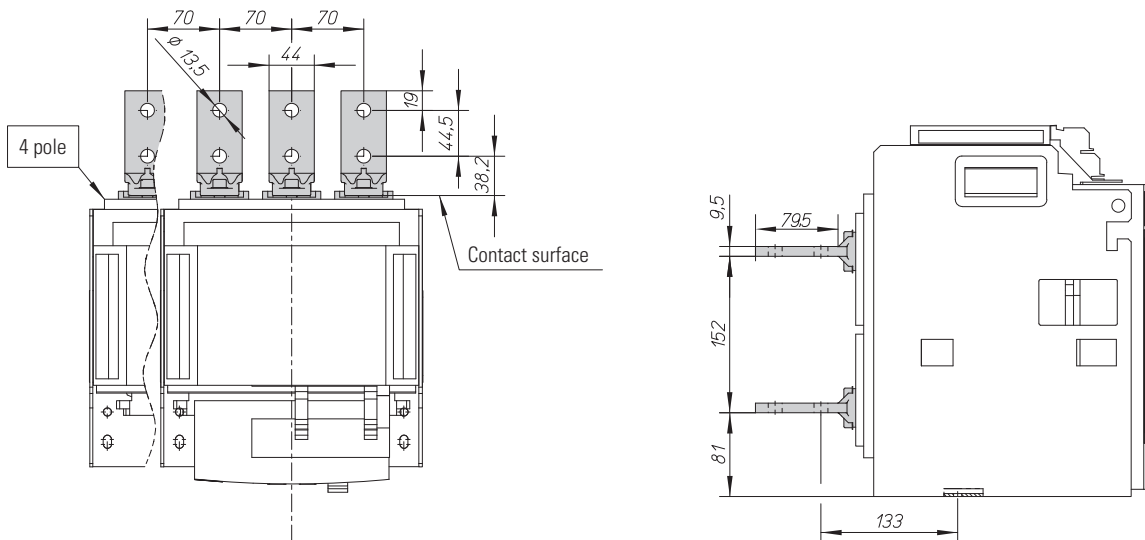
Terminal adapter horizontal/vertical - horizontal mounted

IZMX-THV16...



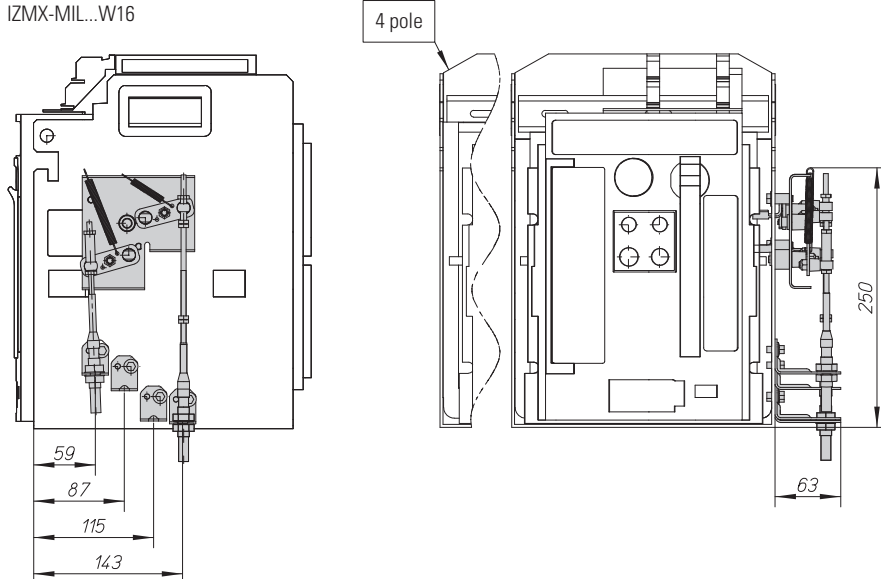
Terminal adapter horizontal/vertical long - horizontal mounted

IZMX-THVL16...



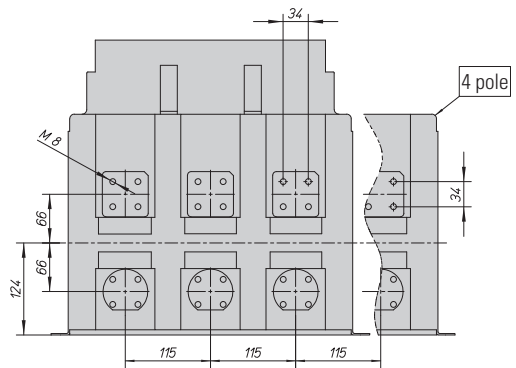
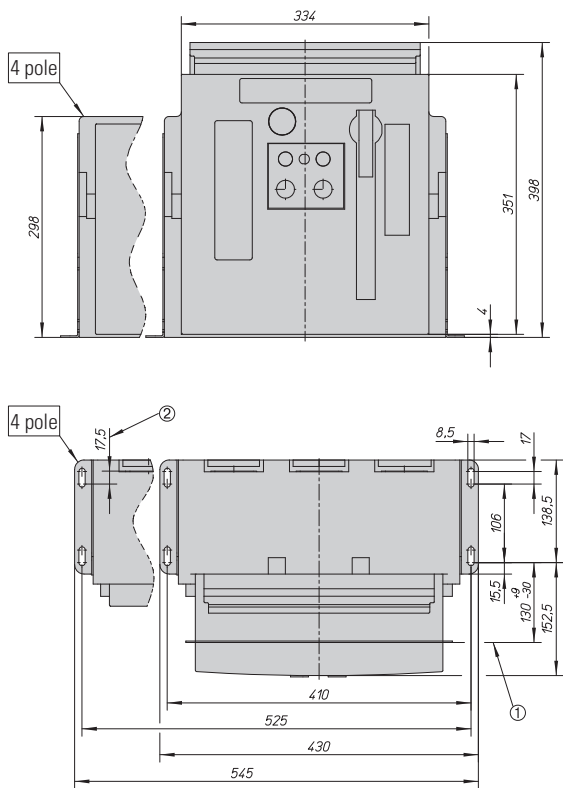
Mechanical interlock for withdrawable units

IZMX-MIL...W16



Fixed Mounted

IZMX40...F, INX40...F



- ① Door/Cover
- ② Contact surface

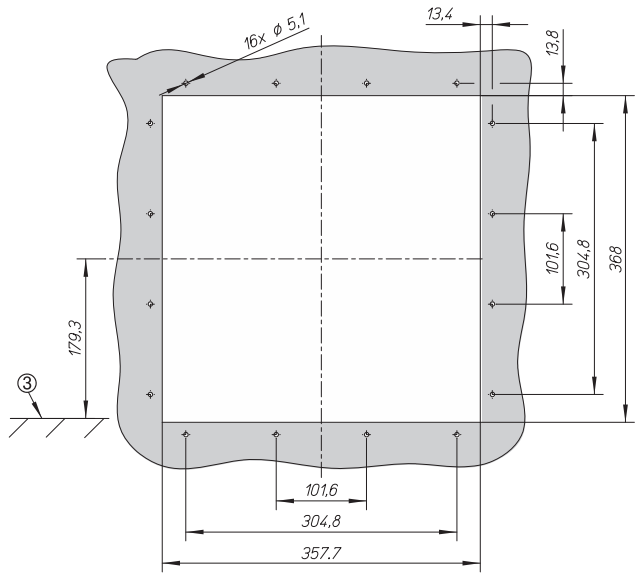
IZMX Series Air Circuit Breakers

Basic Device Dimensions

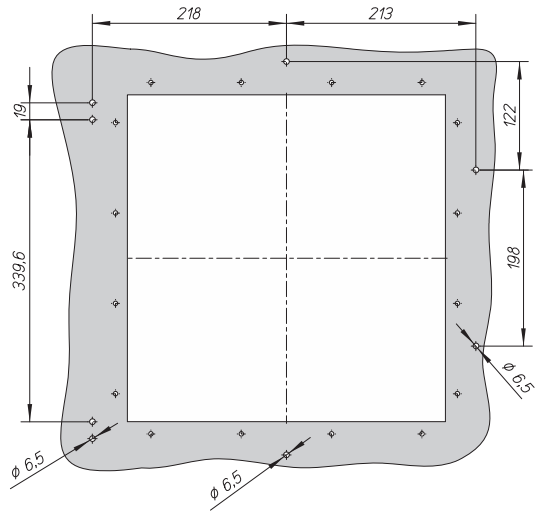
Fixed Mounted Units

Door cut-out IZMX40

IZMX-DEG40-F



IZMX-DC40-F



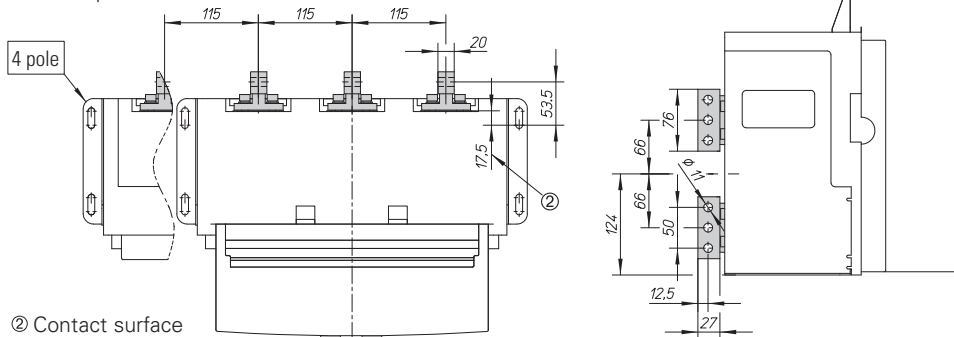
③ Top edge of mounting plate

Fixed Units

Terminal adapter horizontal/vertical - vertical mounted

IZMX-THV40...

Terminals up to 3200 A

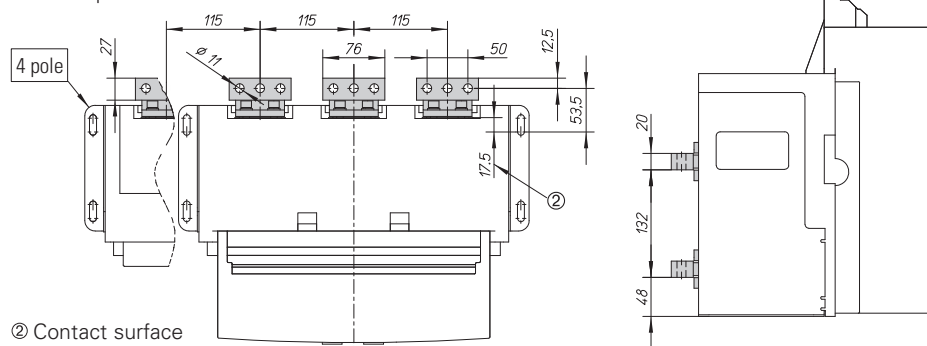


② Contact surface

Terminal adapter horizontal/vertical - horizontal mounted

IZMX-THV40...

Terminals up to 3200 A

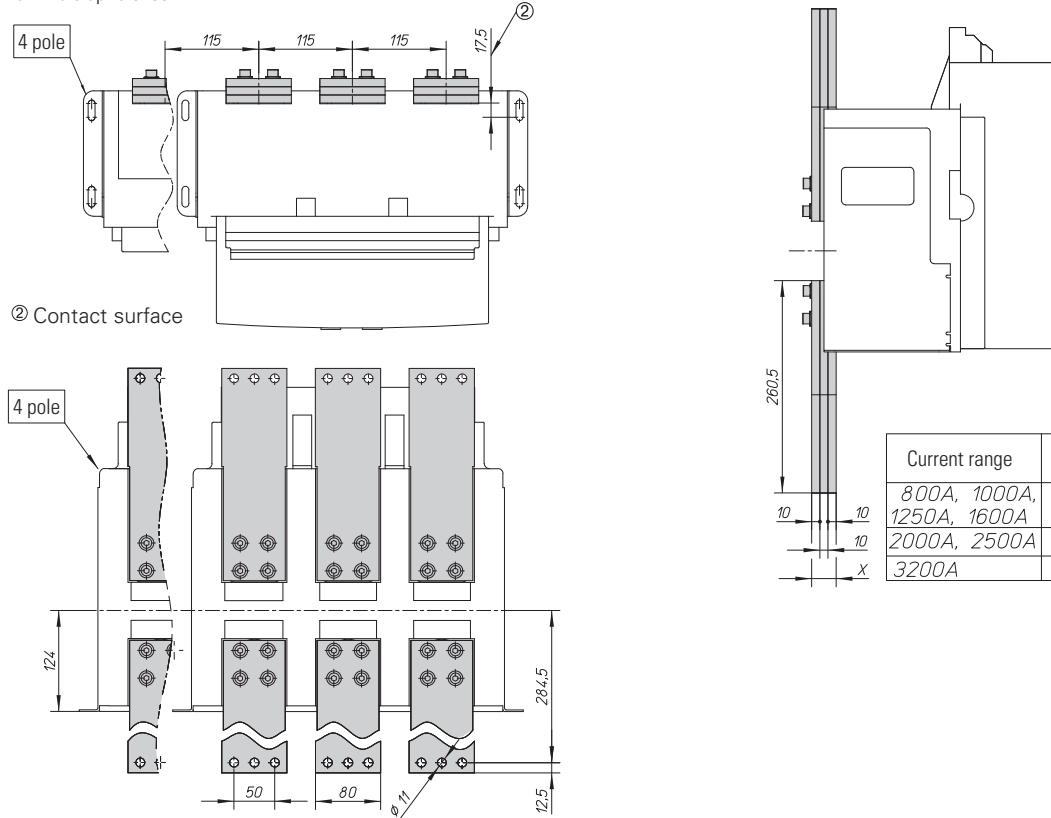


② Contact surface

Terminal adapter front

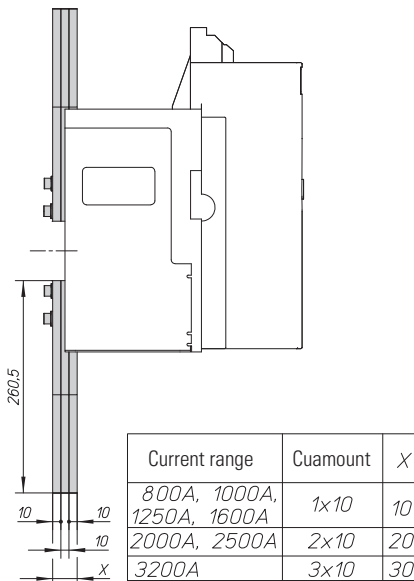
IZMX-TF40...

Terminals up to 3200 A



② Contact surface

4 pole



IZMX Series Air Circuit Breakers

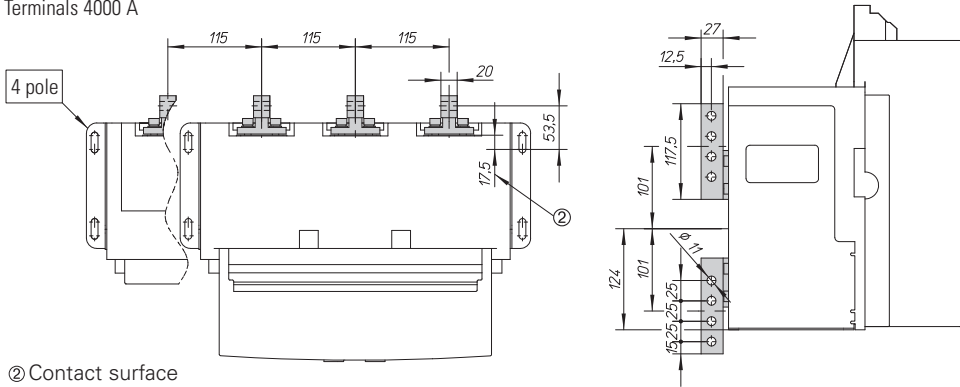
Basic Device Dimensions

Fixed Units

Terminal adapter vertical 4000 A

IZMX-TV40...

Terminals 4000 A

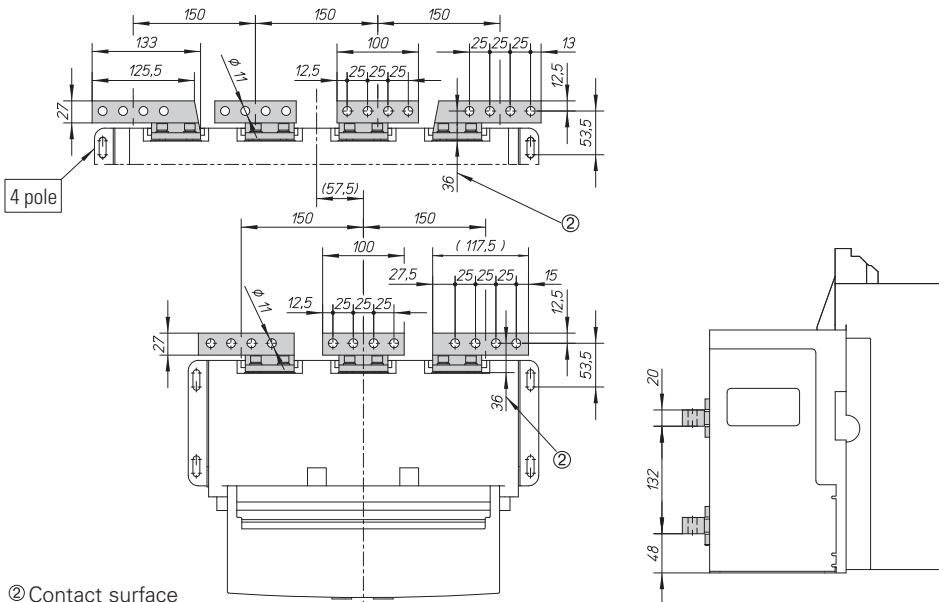


② Contact surface

Terminal adapter horizontal 4000 A

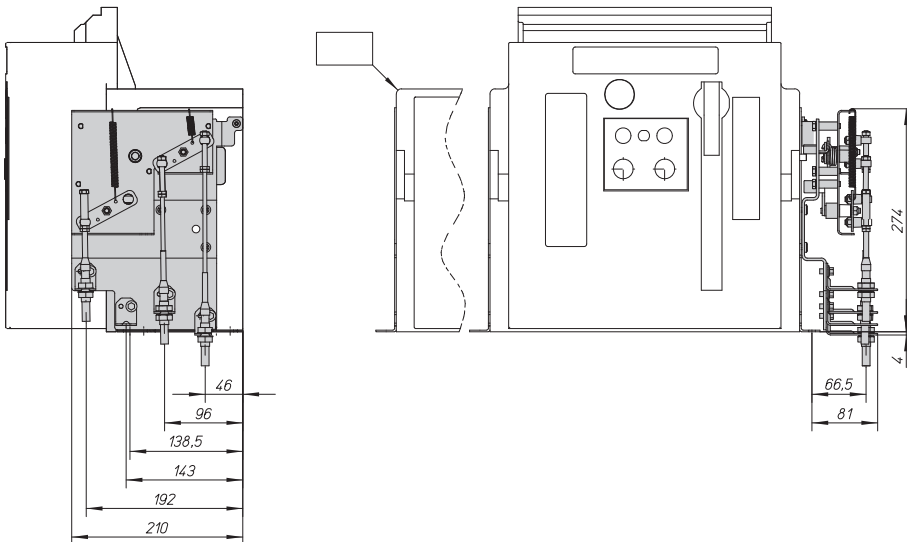
IZMX-TH40...

Terminals 4000 A



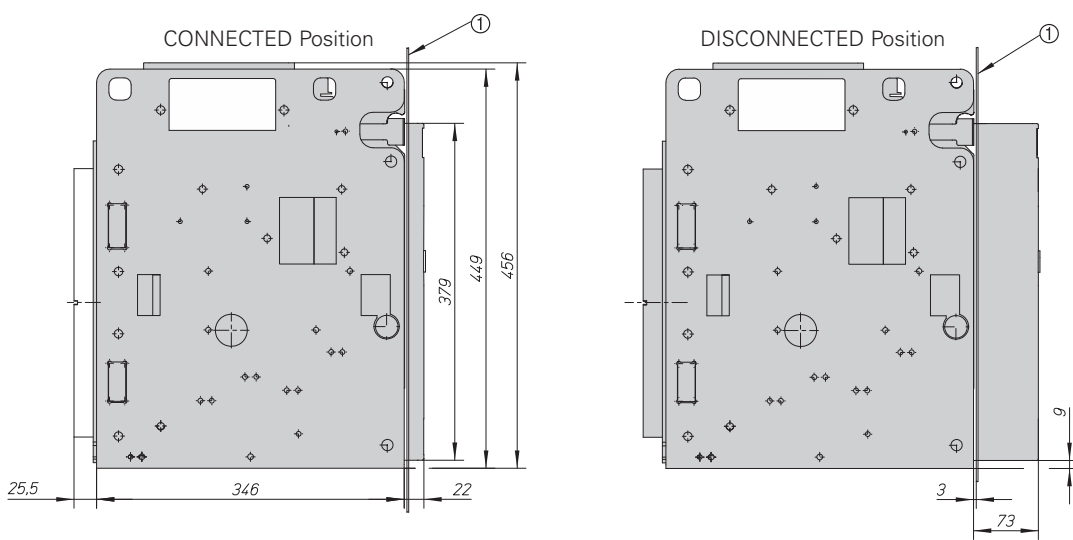
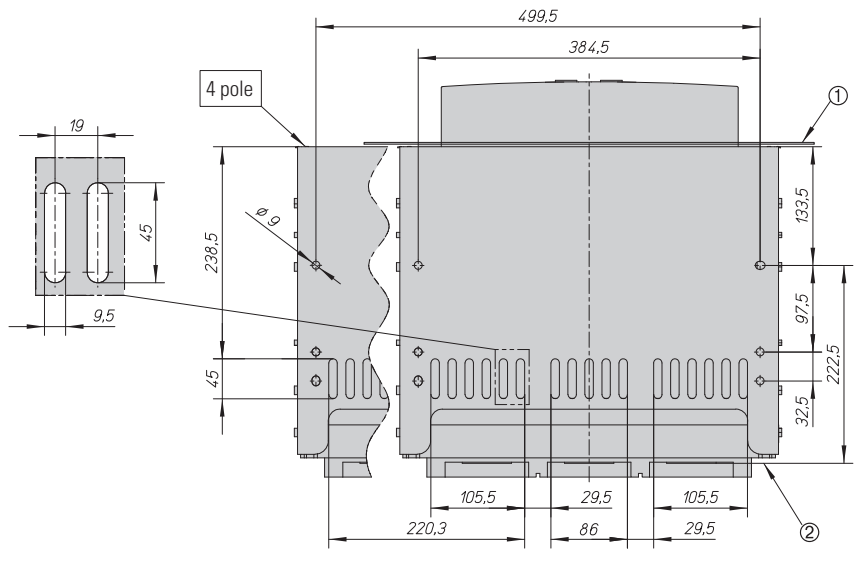
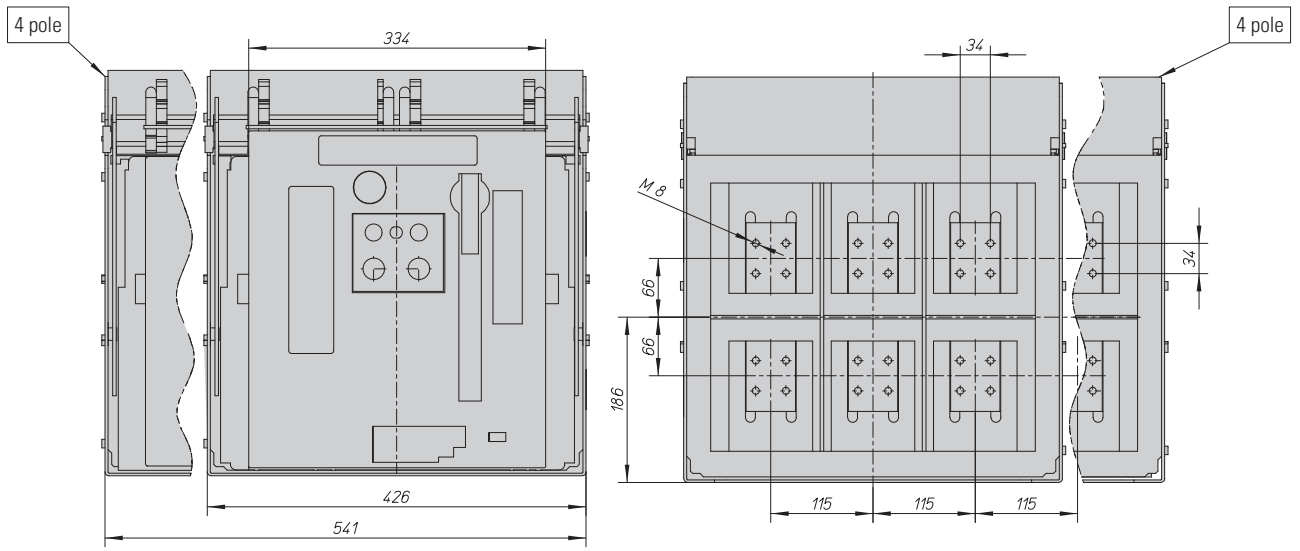
② Contact surface

IZMX-MIL-F40



Withdrawable Units

IZMX40...W, INX40...W



- ① Door/Cover
- ② Contact surface

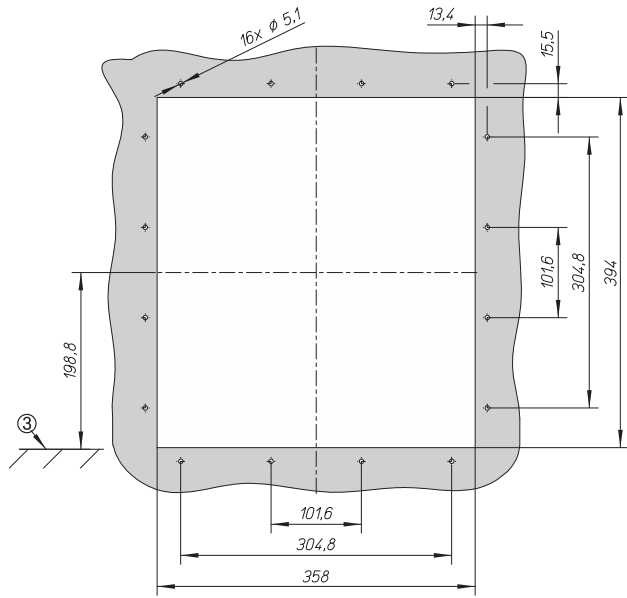
IZMX Series Air Circuit Breakers

Basic Device Dimensions

Withdrawable Units

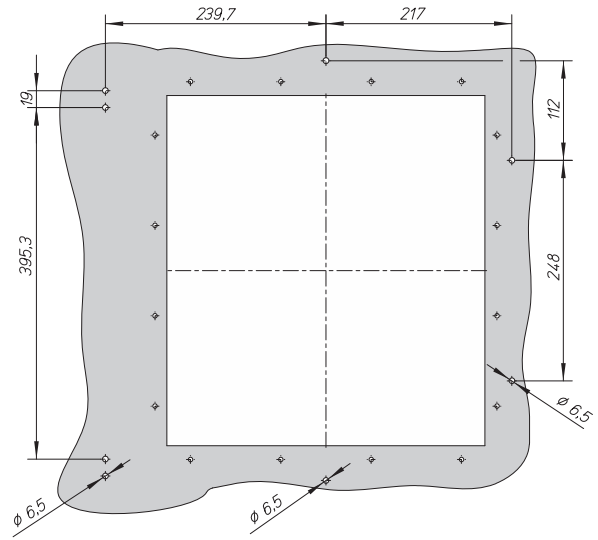
Door cut-out IZMX40

IZMX-DEG40-W



③ Top edge of mounting plate

IZMX-DC40-W

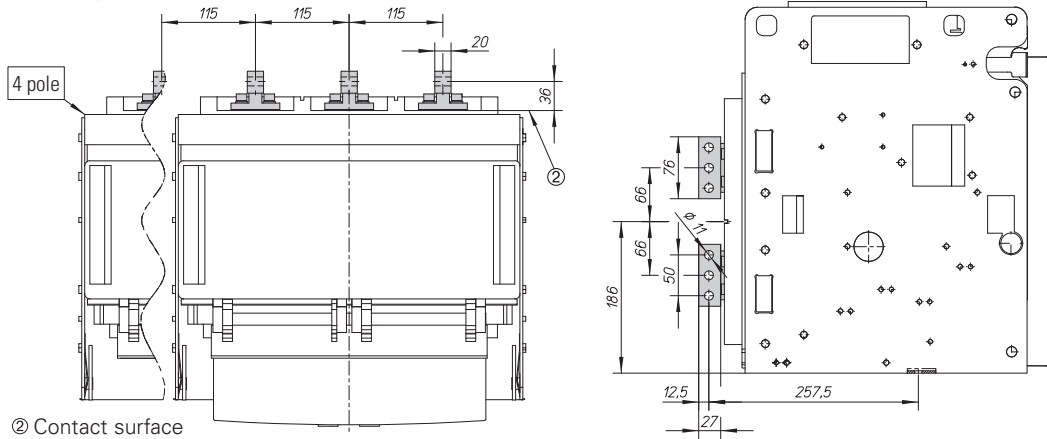


Withdrawable Units

Terminal adapter horizontal/vertical - vertical mounted

IZMX-THV40...

Terminals up to 3200 A

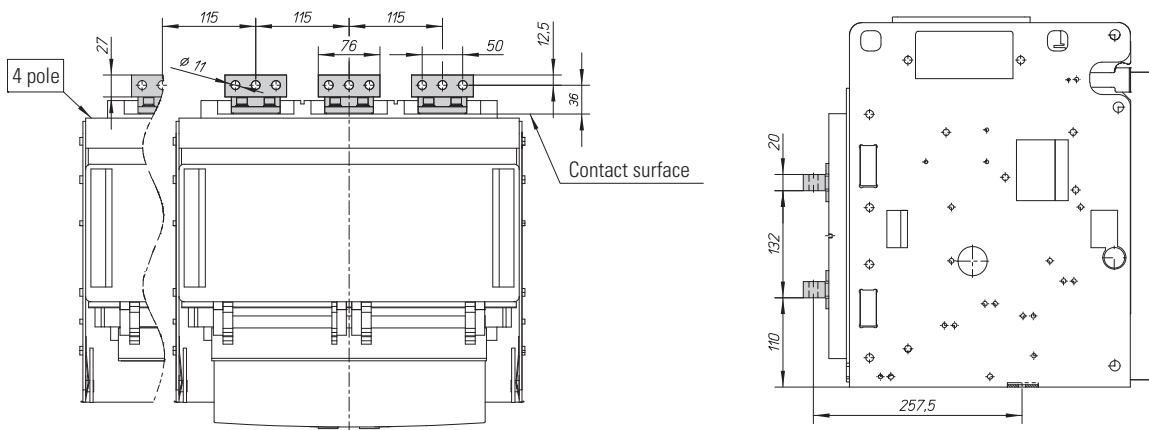


② Contact surface

Terminal adapter horizontal/vertical - horizontal mounted

IZMX-THV40...

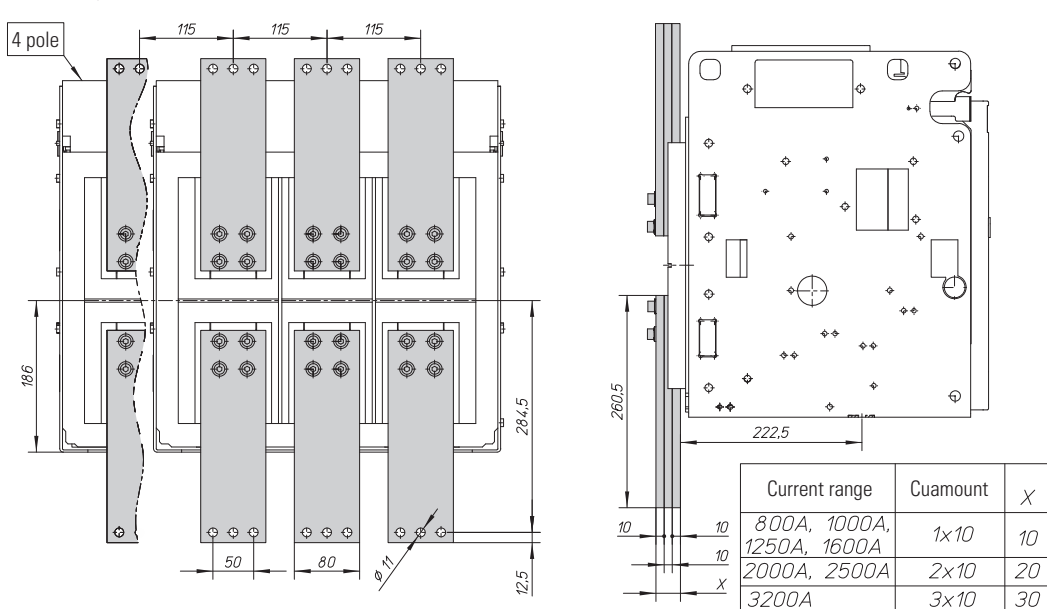
Terminals up to 3200 A



Terminal adapter front

IZMX-TF40...

Terminals up to 3200 A



IZMX Series Air Circuit Breakers

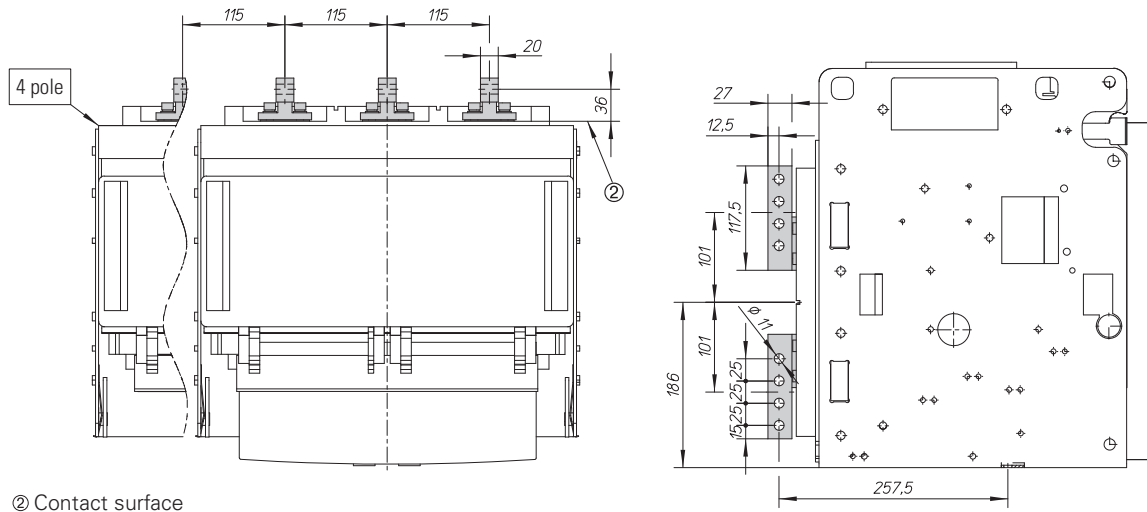
Basic Device Dimensions

Withdrawable Units

Terminal adapter vertical 4000 A

IZMX-TV40...

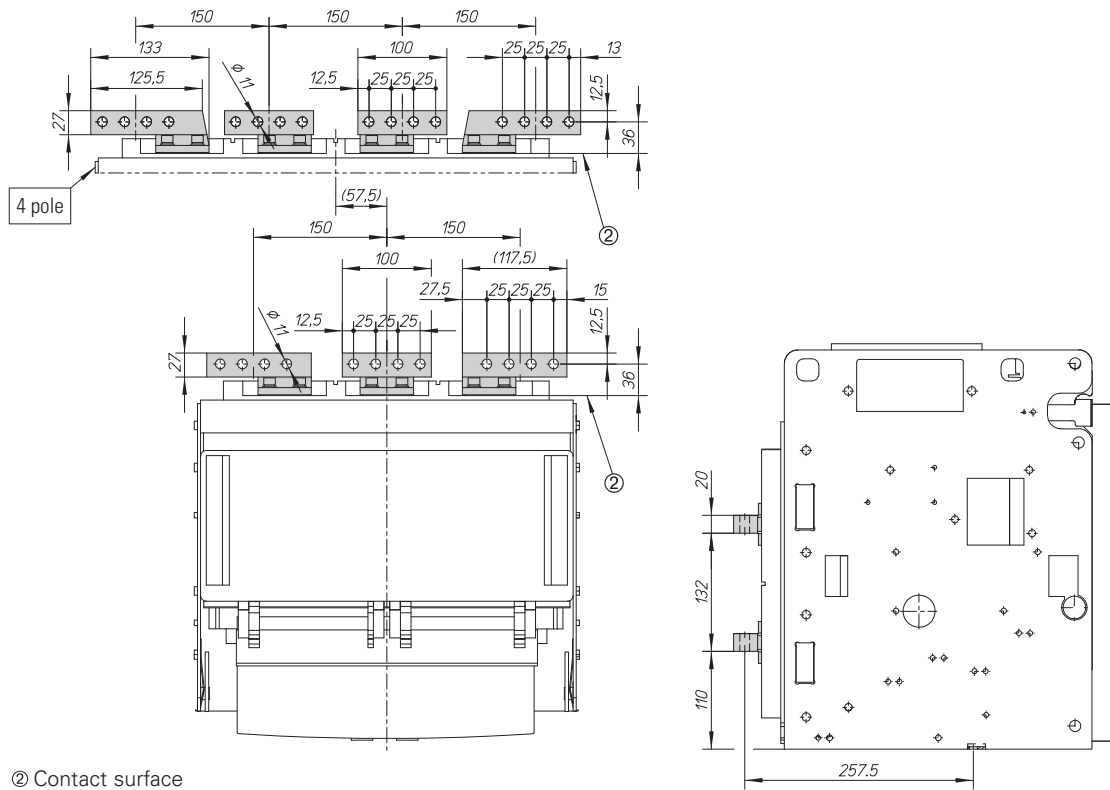
Terminals 4000 A



Terminal adapter horizontal 4000 A

IZMX-TH40...

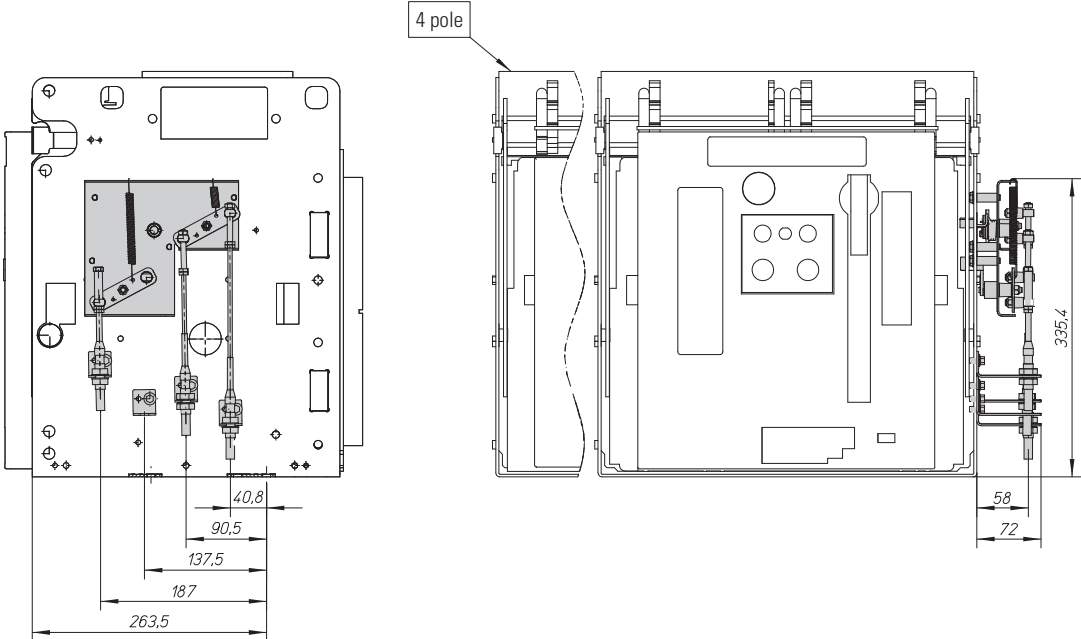
Terminals 4000 A



Withdrawable Units

Mechanical interlock for withdrawable units

IZMX-MIL-W40

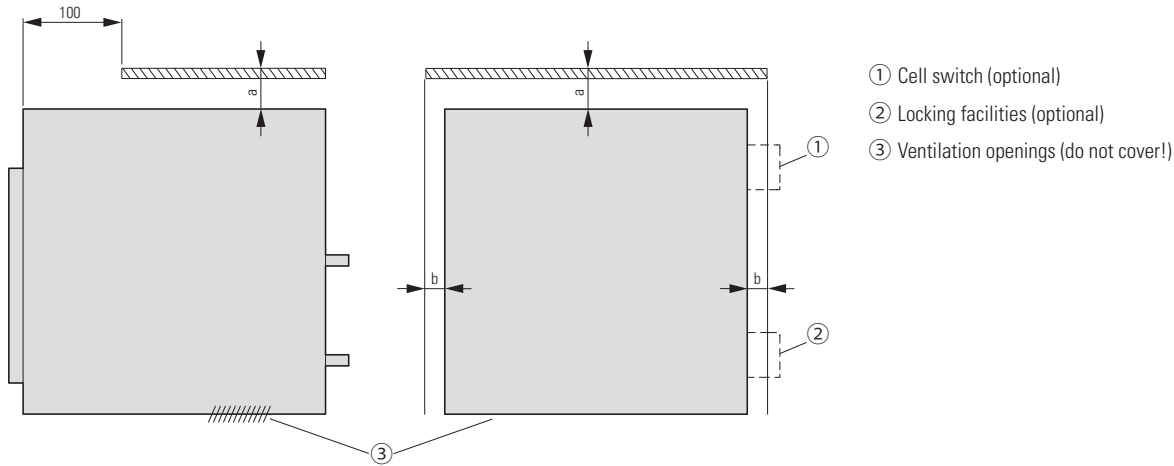


IZMX Series Air Circuit Breakers

Minimum Clearances

Recommended safety clearances

The following information about safety distances is intended to provide a guideline for the installation of circuit-breakers in an enclosure.



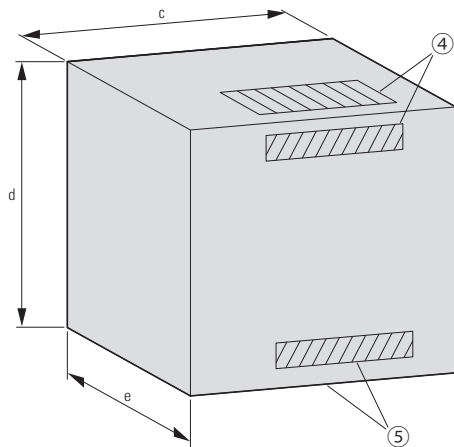
	Enclosure clearance	To insulated surface mm	To grounded metal surface mm	With cell switch or locking facilities mm
Withdrawable	a	0	0	0
	b	25	25	25/75
Fixed	a	150	250	–
	b	30	70	–

Recommended enclosure clearance and ventilation

The illustration shows a typical enclosure.

The table below lists the associated minimum distances between enclosures and ventilation openings.

This information is intended as a guideline for constructing a suitable circuit-breaker enclosure. Ensure the integration complies with IEC 61439.



c	Width of cassette + 75 mm
d	550 mm
e	450 mm (front control panel bay)
Ventilation holes	160 cm ² (800 - 3200 A) } Top and bottom 320 cm ² (4000 A)

④ Top or rear vent

⑤ Rear or lower vent

Electrically operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO, External power module to converter 220VAC to 24VDC to power trip unit.

Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-V06F E02	90000019400021	IZMX16B4-V06F E02	90000019400051
	800	42	IZMX16B3-V08F E02	90000019400022	IZMX16B4-V08F E02	90000019400052
	1000	42	IZMX16B3-V10F E02	90000019400023	IZMX16B4-V10F E02	90000019400053
	1250	42	IZMX16B3-V12F E02	90000019400024	IZMX16B4-V12F E02	90000019400054
	1600	42	IZMX16B3-V16F E02	90000019400025	IZMX16B4-V16F E02	90000019400055
	630	50	IZMX16N3-V06F E02	90000019400031	IZMX16N4-V06F E02	90000019400061
	800	50	IZMX16N3-V08F E02	90000019400032	IZMX16N4-V08F E02	90000019400062
	1000	50	IZMX16N3-V10F E02	90000019400033	IZMX16N4-V10F E02	90000019400063
	1250	50	IZMX16N3-V12F E02	90000019400034	IZMX16N4-V12F E02	90000019400064
	1600	50	IZMX16N3-V16F E02	90000019400035	IZMX16N4-V16F E02	90000019400065
	630	66	IZMX16H3-V06F E02	90000019400041	IZMX16H4-V06F E02	90000019400071
	800	66	IZMX16H3-V08F E02	90000019400042	IZMX16H4-V08F E02	90000019400072
	1000	66	IZMX16H3-V10F E02	90000019400043	IZMX16H4-V10F E02	90000019400073
	1250	66	IZMX16H3-V12F E02	90000019400044	IZMX16H4-V12F E02	90000019400074
	1600	66	IZMX16H3-V16F E02	90000019400045	IZMX16H4-V16F E02	90000019400075
	IZMX40	800	66	IZMX40B3-V08F E02	90000019400225	IZMX40B4-V08F E02
1000		66	IZMX40B3-V10F E02	90000019400226	IZMX40B4-V10F E02	90000019400274
1250		66	IZMX40B3-V12F E02	90000019400227	IZMX40B4-V12F E02	90000019400275
1600		66	IZMX40B3-V16F E02	90000019400228	IZMX40B4-V16F E02	90000019400276
2000		66	IZMX40B3-V20F E02	90000019400229	IZMX40B4-V20F E02	90000019400277
2500		66	IZMX40B3-V25F E02	90000019400230	IZMX40B4-V25F E02	90000019400278
3200		66	IZMX40B3-V32F E02	90000019400231	IZMX40B4-V32F E02	90000019400279
4000		66	IZMX40B3-V40F E02	90000019400232	IZMX40B4-V40F E02	90000019400280
800		85	IZMX40N3-V08F E02	90000019400241	IZMX40N4-V08F E02	90000019400289
1000		85	IZMX40N3-V10F E02	90000019400242	IZMX40N4-V10F E02	90000019400290
1250		85	IZMX40N3-V12F E02	90000019400243	IZMX40N4-V12F E02	90000019400291
1600		85	IZMX40N3-V16F E02	90000019400244	IZMX40N4-V16F E02	90000019400292
2000		85	IZMX40N3-V20F E02	90000019400245	IZMX40N4-V20F E02	90000019400293
2500		85	IZMX40N3-V25F E02	90000019400246	IZMX40N4-V25F E02	90000019400294
3200		85	IZMX40N3-V32F E02	90000019400247	IZMX40N4-V32F E02	90000019400295
4000		85	IZMX40N3-V40F E02	90000019400248	IZMX40N4-V40F E02	90000019400296
800		105	IZMX40H3-V08F E02	90000019400257	IZMX40H4-V08F E02	90000019400305
1000		105	IZMX40H3-V10F E02	90000019400258	IZMX40H4-V10F E02	90000019400306
1250		105	IZMX40H3-V12F E02	90000019400259	IZMX40H4-V12F E02	90000019400307
1600		105	IZMX40H3-V16F E02	90000019400260	IZMX40H4-V16F E02	90000019400308
2000		105	IZMX40H3-V20F E02	90000019400261	IZMX40H4-V20F E02	90000019400309
2500		105	IZMX40H3-V25F E02	90000019400262	IZMX40H4-V25F E02	90000019400310
3200		105	IZMX40H3-V32F E02	90000019400263	IZMX40H4-V32F E02	90000019400311
4000		105	IZMX40H3-V40F E02	90000019400264	IZMX40H4-V40F E02	90000019400312

IZMX Series Air Circuit Breakers

IZMX Type Reference List

Electrically operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO, External power module to converter 220VAC to 24VDC to power trip unit.

Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-U06F E02	90000019400026	IZMX16B4-U06F E02	90000019400056
	800	42	IZMX16B3-U08F E02	90000019400027	IZMX16B4-U08F E02	90000019400057
	1000	42	IZMX16B3-U10F E02	90000019400028	IZMX16B4-U10F E02	90000019400058
	1250	42	IZMX16B3-U12F E02	90000019400029	IZMX16B4-U12F E02	90000019400059
	1600	42	IZMX16B3-U16F E02	90000019400030	IZMX16B4-U16F E02	90000019400060
	630	50	IZMX16N3-U06F E02	90000019400036	IZMX16N4-U06F E02	90000019400066
	800	50	IZMX16N3-U08F E02	90000019400037	IZMX16N4-U08F E02	90000019400067
	1000	50	IZMX16N3-U10F E02	90000019400038	IZMX16N4-U10F E02	90000019400068
	1250	50	IZMX16N3-U12F E02	90000019400039	IZMX16N4-U12F E02	90000019400069
	1600	50	IZMX16N3-U16F E02	90000019400040	IZMX16N4-U16F E02	90000019400070
	630	66	IZMX16H3-U06F E02	90000019400046	IZMX16H4-U06F E02	90000019400076
	800	66	IZMX16H3-U08F E02	90000019400047	IZMX16H4-U08F E02	90000019400077
	1000	66	IZMX16H3-U10F E02	90000019400048	IZMX16H4-U10F E02	90000019400078
	1250	66	IZMX16H3-U12F E02	90000019400049	IZMX16H4-U12F E02	90000019400079
1600	66	IZMX16H3-U16F E02	90000019400050	IZMX16H4-U16F E02	90000019400080	
IZMX40	800	66	IZMX40B3-U08F E02	90000019400233	IZMX40B4-U08F E02	90000019400281
	1000	66	IZMX40B3-U10F E02	90000019400234	IZMX40B4-U10F E02	90000019400282
	1250	66	IZMX40B3-U12F E02	90000019400235	IZMX40B4-U12F E02	90000019400283
	1600	66	IZMX40B3-U16F E02	90000019400236	IZMX40B4-U16F E02	90000019400284
	2000	66	IZMX40B3-U20F E02	90000019400237	IZMX40B4-U20F E02	90000019400285
	2500	66	IZMX40B3-U25F E02	90000019400238	IZMX40B4-U25F E02	90000019400286
	3200	66	IZMX40B3-U32F E02	90000019400239	IZMX40B4-U32F E02	90000019400287
	4000	66	IZMX40B3-U40F E02	90000019400240	IZMX40B4-U40F E02	90000019400288
	800	85	IZMX40N3-U08F E02	90000019400249	IZMX40N4-U08F E02	90000019400297
	1000	85	IZMX40N3-U10F E02	90000019400250	IZMX40N4-U10F E02	90000019400298
	1250	85	IZMX40N3-U12F E02	90000019400251	IZMX40N4-U12F E02	90000019400299
	1600	85	IZMX40N3-U16F E02	90000019400252	IZMX40N4-U16F E02	90000019400300
	2000	85	IZMX40N3-U20F E02	90000019400253	IZMX40N4-U20F E02	90000019400301
	2500	85	IZMX40N3-U25F E02	90000019400254	IZMX40N4-U25F E02	90000019400302
	3200	85	IZMX40N3-U32F E02	90000019400255	IZMX40N4-U32F E02	90000019400303
	4000	85	IZMX40N3-U40F E02	90000019400256	IZMX40N4-U40F E02	90000019400304
	800	105	IZMX40H3-U08F E02	90000019400265	IZMX40H4-U08F E02	90000019400313
	1000	105	IZMX40H3-U10F E02	90000019400266	IZMX40H4-U10F E02	90000019400314
	1250	105	IZMX40H3-U12F E02	90000019400267	IZMX40H4-U12F E02	90000019400315
	1600	105	IZMX40H3-U16F E02	90000019400268	IZMX40H4-U16F E02	90000019400316
	2000	105	IZMX40H3-U20F E02	90000019400269	IZMX40H4-U20F E02	90000019400317
	2500	105	IZMX40H3-U25F E02	90000019400270	IZMX40H4-U25F E02	90000019400318
	3200	105	IZMX40H3-U32F E02	90000019400271	IZMX40H4-U32F E02	90000019400319
	4000	105	IZMX40H3-U40F E02	90000019400272	IZMX40H4-U40F E02	90000019400320

Electrically operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO, External power module to converter 220VAC to 24VDC to power trip unit.

Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-V06W E02	90000019400081	IZMX16B4-V06W E02	90000019400111
	800	42	IZMX16B3-V08W E02	90000019400082	IZMX16B4-V08W E02	90000019400112
	1000	42	IZMX16B3-V10W E02	90000019400083	IZMX16B4-V10W E02	90000019400113
	1250	42	IZMX16B3-V12W E02	90000019400084	IZMX16B4-V12W E02	90000019400114
	1600	42	IZMX16B3-V16W E02	90000019400085	IZMX16B4-V16W E02	90000019400115
	630	50	IZMX16N3-V06W E02	90000019400091	IZMX16N4-V06W E02	90000019400121
	800	50	IZMX16N3-V08W E02	90000019400092	IZMX16N4-V08W E02	90000019400122
	1000	50	IZMX16N3-V10W E02	90000019400093	IZMX16N4-V10W E02	90000019400123
	1250	50	IZMX16N3-V12W E02	90000019400094	IZMX16N4-V12W E02	90000019400124
	1600	50	IZMX16N3-V16W E02	90000019400095	IZMX16N4-V16W E02	90000019400125
	630	66	IZMX16H3-V06W E02	90000019400101	IZMX16H4-V06W E02	90000019400131
	800	66	IZMX16H3-V08W E02	90000019400102	IZMX16H4-V08W E02	90000019400132
	1000	66	IZMX16H3-V10W E02	90000019400103	IZMX16H4-V10W E02	90000019400133
	1250	66	IZMX16H3-V12W E02	90000019400104	IZMX16H4-V12W E02	90000019400134
	1600	66	IZMX16H3-V16W E02	90000019400105	IZMX16H4-V16W E02	90000019400135
	IZMX40	800	66	IZMX40B3-V08W E02	90000019400321	IZMX40B4-V08W E02
1000		66	IZMX40B3-V10W E02	90000019400322	IZMX40B4-V10W E02	90000019400370
1250		66	IZMX40B3-V12W E02	90000019400323	IZMX40B4-V12W E02	90000019400371
1600		66	IZMX40B3-V16W E02	90000019400324	IZMX40B4-V16W E02	90000019400372
2000		66	IZMX40B3-V20W E02	90000019400325	IZMX40B4-V20W E02	90000019400373
2500		66	IZMX40B3-V25W E02	90000019400326	IZMX40B4-V25W E02	90000019400374
3200		66	IZMX40B3-V32W E02	90000019400327	IZMX40B4-V32W E02	90000019400375
4000		66	IZMX40B3-V40W E02	90000019400328	IZMX40B4-V40W E02	90000019400376
800		85	IZMX40N3-V08W E02	90000019400337	IZMX40N4-V08W E02	90000019400385
1000		85	IZMX40N3-V10W E02	90000019400338	IZMX40N4-V10W E02	90000019400386
1250		85	IZMX40N3-V12W E02	90000019400339	IZMX40N4-V12W E02	90000019400387
1600		85	IZMX40N3-V16W E02	90000019400340	IZMX40N4-V16W E02	90000019400388
2000		85	IZMX40N3-V20W E02	90000019400341	IZMX40N4-V20W E02	90000019400389
2500		85	IZMX40N3-V25W E02	90000019400342	IZMX40N4-V25W E02	90000019400390
3200		85	IZMX40N3-V32W E02	90000019400343	IZMX40N4-V32W E02	90000019400391
4000		85	IZMX40N3-V40W E02	90000019400344	IZMX40N4-V40W E02	90000019400392
800		105	IZMX40H3-V08W E02	90000019400353	IZMX40H4-V08W E02	90000019400401
1000		105	IZMX40H3-V10W E02	90000019400354	IZMX40H4-V10W E02	90000019400402
1250		105	IZMX40H3-V12W E02	90000019400355	IZMX40H4-V12W E02	90000019400403
1600		105	IZMX40H3-V16W E02	90000019400356	IZMX40H4-V16W E02	90000019400404
2000		105	IZMX40H3-V20W E02	90000019400357	IZMX40H4-V20W E02	90000019400405
2500		105	IZMX40H3-V25W E02	90000019400358	IZMX40H4-V25W E02	90000019400406
3200		105	IZMX40H3-V32W E02	90000019400359	IZMX40H4-V32W E02	90000019400407
4000		105	IZMX40H3-V40W E02	90000019400360	IZMX40H4-V40W E02	90000019400408

IZMX Series Air Circuit Breakers

IZMX Type Reference List

Electrically operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO, External power module to converter 220VAC to 24VDC to power trip unit.

Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-U06W E02	90000019400086	IZMX16B4-U06W E02	90000019400116
	800	42	IZMX16B3-U08W E02	90000019400087	IZMX16B4-U08W E02	90000019400117
	1000	42	IZMX16B3-U10W E02	90000019400088	IZMX16B4-U10W E02	90000019400118
	1250	42	IZMX16B3-U12W E02	90000019400089	IZMX16B4-U12W E02	90000019400119
	1600	42	IZMX16B3-U16W E02	90000019400090	IZMX16B4-U16W E02	90000019400120
	630	50	IZMX16N3-U06W E02	90000019400096	IZMX16N4-U06W E02	90000019400126
	800	50	IZMX16N3-U08W E02	90000019400097	IZMX16N4-U08W E02	90000019400127
	1000	50	IZMX16N3-U10W E02	90000019400098	IZMX16N4-U10W E02	90000019400128
	1250	50	IZMX16N3-U12W E02	90000019400099	IZMX16N4-U12W E02	90000019400129
	1600	50	IZMX16N3-U16W E02	90000019400100	IZMX16N4-U16W E02	90000019400130
	630	66	IZMX16H3-U06W E02	90000019400106	IZMX16H4-U06W E02	90000019400136
	800	66	IZMX16H3-U08W E02	90000019400107	IZMX16H4-U08W E02	90000019400137
	1000	66	IZMX16H3-U10W E02	90000019400108	IZMX16H4-U10W E02	90000019400138
	1250	66	IZMX16H3-U12W E02	90000019400109	IZMX16H4-U12W E02	90000019400139
1600	66	IZMX16H3-U16W E02	90000019400110	IZMX16H4-U16W E02	90000019400140	
IZMX40	800	66	IZMX40B3-U08W E02	90000019400329	IZMX40B4-U08W E02	90000019400377
	1000	66	IZMX40B3-U10W E02	90000019400330	IZMX40B4-U10W E02	90000019400378
	1250	66	IZMX40B3-U12W E02	90000019400331	IZMX40B4-U12W E02	90000019400379
	1600	66	IZMX40B3-U16W E02	90000019400332	IZMX40B4-U16W E02	90000019400380
	2000	66	IZMX40B3-U20W E02	90000019400333	IZMX40B4-U20W E02	90000019400381
	2500	66	IZMX40B3-U25W E02	90000019400334	IZMX40B4-U25W E02	90000019400382
	3200	66	IZMX40B3-U32W E02	90000019400335	IZMX40B4-U32W E02	90000019400383
	4000	66	IZMX40B3-U40W E02	90000019400336	IZMX40B4-U40W E02	90000019400384
	800	85	IZMX40N3-U08W E02	90000019400345	IZMX40N4-U08W E02	90000019400393
	1000	85	IZMX40N3-U10W E02	90000019400346	IZMX40N4-U10W E02	90000019400394
	1250	85	IZMX40N3-U12W E02	90000019400347	IZMX40N4-U12W E02	90000019400395
	1600	85	IZMX40N3-U16W E02	90000019400348	IZMX40N4-U16W E02	90000019400396
	2000	85	IZMX40N3-U20W E02	90000019400349	IZMX40N4-U20W E02	90000019400397
	2500	85	IZMX40N3-U25W E02	90000019400350	IZMX40N4-U25W E02	90000019400398
	3200	85	IZMX40N3-U32W E02	90000019400351	IZMX40N4-U32W E02	90000019400399
	4000	85	IZMX40N3-U40W E02	90000019400352	IZMX40N4-U40W E02	90000019400400
	800	105	IZMX40H3-U08W E02	90000019400361	IZMX40H4-U08W E02	90000019400409
	1000	105	IZMX40H3-U10W E02	90000019400362	IZMX40H4-U10W E02	90000019400410
	1250	105	IZMX40H3-U12W E02	90000019400363	IZMX40H4-U12W E02	90000019400411
	1600	105	IZMX40H3-U16W E02	90000019400364	IZMX40H4-U16W E02	90000019400412
	2000	105	IZMX40H3-U20W E02	90000019400365	IZMX40H4-U20W E02	90000019400413
	2500	105	IZMX40H3-U25W E02	90000019400366	IZMX40H4-U25W E02	90000019400414
	3200	105	IZMX40H3-U32W E02	90000019400367	IZMX40H4-U32W E02	90000019400415
	4000	105	IZMX40H3-U40W E02	90000019400368	IZMX40H4-U40W E02	90000019400416

Electrically operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO.

Switch Disconnecter, Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	INX16B3-06F E02	90000019400001	INX16B4-06F E02	90000019400006
	800	42	INX16B3-08F E02	90000019400002	INX16B4-08F E02	90000019400007
	1000	42	INX16B3-10F E02	90000019400003	INX16B4-10F E02	90000019400008
	1250	42	INX16B3-12F E02	90000019400004	INX16B4-12F E02	90000019400009
	1600	42	INX16B3-16F E02	90000019400005	INX16B4-16F E02	90000019400010
IZMX40	800	66	INX40B3-08F E02	90000019400141	INX40B4-08F E02	90000019400157
	1000	66	INX40B3-10F E02	90000019400142	INX40B4-10F E02	90000019400158
	1250	66	INX40B3-12F E02	90000019400143	INX40B4-12F E02	90000019400159
	1600	66	INX40B3-16F E02	90000019400144	INX40B4-16F E02	90000019400160
	2000	66	INX40B3-20F E02	90000019400145	INX40B4-20F E02	90000019400161
	2500	66	INX40B3-25F E02	90000019400146	INX40B4-25F E02	90000019400162
	3200	66	INX40B3-32F E02	90000019400147	INX40B4-32F E02	90000019400163
	4000	66	INX40B3-40F E02	90000019400148	INX40B4-40F E02	90000019400164
	800	85	INX40N3-08F E02	90000019400149	INX40N4-08F E02	90000019400165
	1000	85	INX40N3-10F E02	90000019400150	INX40N4-10F E02	90000019400166
	1250	85	INX40N3-12F E02	90000019400151	INX40N4-12F E02	90000019400167
	1600	85	INX40N3-16F E02	90000019400152	INX40N4-16F E02	90000019400168
	2000	85	INX40N3-20F E02	90000019400153	INX40N4-20F E02	90000019400169
	2500	85	INX40N3-25F E02	90000019400154	INX40N4-25F E02	90000019400170
	3200	85	INX40N3-32F E02	90000019400155	INX40N4-32F E02	90000019400171
	4000	85	INX40N3-40F E02	90000019400156	INX40N4-40F E02	90000019400172

IZMX Series Air Circuit Breakers

INX Type Reference List

Electrically operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below), 208-250 VAC/DC Charging motor, 220-240 VAC/DC Shunt trip, 220-240 VAC/DC Closing spring release, Additional 2a2b Aux contact (4a4b total), Over current trip switch(OTS) 2CO.

Switch Disconnecter, Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	INX16B3-06W E02	90000019400011	INX16B4-06W E02	90000019400016
	800	42	INX16B3-08W E02	90000019400012	INX16B4-08W E02	90000019400017
	1000	42	INX16B3-10W E02	90000019400013	INX16B4-10W E02	90000019400018
	1250	42	INX16B3-12W E02	90000019400014	INX16B4-12W E02	90000019400019
	1600	42	INX16B3-16W E02	90000019400015	INX16B4-16W E02	90000019400020
IZMX40	800	66	INX40B3-08W E02	90000019400173	INX40B4-08W E02	90000019400189
	1000	66	INX40B3-10W E02	90000019400174	INX40B4-10W E02	90000019400190
	1250	66	INX40B3-12W E02	90000019400175	INX40B4-12W E02	90000019400191
	1600	66	INX40B3-16W E02	90000019400176	INX40B4-16W E02	90000019400192
	2000	66	INX40B3-20W E02	90000019400177	INX40B4-20W E02	90000019400193
	2500	66	INX40B3-25W E02	90000019400178	INX40B4-25W E02	90000019400194
	3200	66	INX40B3-32W E02	90000019400179	INX40B4-32W E02	90000019400195
	4000	66	INX40B3-40W E02	90000019400180	INX40B4-40W E02	90000019400196
	800	85	INX40N3-08W E02	90000019400181	INX40N4-08W E02	90000019400197
	1000	85	INX40N3-10W E02	90000019400182	INX40N4-10W E02	90000019400198
	1250	85	INX40N3-12W E02	90000019400183	INX40N4-12W E02	90000019400199
	1600	85	INX40N3-16W E02	90000019400184	INX40N4-16W E02	90000019400200
	2000	85	INX40N3-20W E02	90000019400185	INX40N4-20W E02	90000019400201
	2500	85	INX40N3-25W E02	90000019400186	INX40N4-25W E02	90000019400202
	3200	85	INX40N3-32W E02	90000019400187	INX40N4-32W E02	90000019400203
	4000	85	INX40N3-40W E02	90000019400188	INX40N4-40W E02	90000019400204

Manually operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below).

Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-V06F MO	90000019400477	IZMX16B4-V06F MO	90000019400507
	800	42	IZMX16B3-V08F MO	90000019400478	IZMX16B4-V08F MO	90000019400508
	1000	42	IZMX16B3-V10F MO	90000019400479	IZMX16B4-V10F MO	90000019400509
	1250	42	IZMX16B3-V12F MO	90000019400480	IZMX16B4-V12F MO	90000019400510
	1600	42	IZMX16B3-V16F MO	90000019400481	IZMX16B4-V16F MO	90000019400511
	630	50	IZMX16N3-V06F MO	90000019400487	IZMX16N4-V06F MO	90000019400517
	800	50	IZMX16N3-V08F MO	90000019400488	IZMX16N4-V08F MO	90000019400518
	1000	50	IZMX16N3-V10F MO	90000019400489	IZMX16N4-V10F MO	90000019400519
	1250	50	IZMX16N3-V12F MO	90000019400490	IZMX16N4-V12F MO	90000019400520
	1600	50	IZMX16N3-V16F MO	90000019400491	IZMX16N4-V16F MO	90000019400521
	630	66	IZMX16H3-V06F MO	90000019400497	IZMX16H4-V06F MO	90000019400527
	800	66	IZMX16H3-V08F MO	90000019400498	IZMX16H4-V08F MO	90000019400528
	1000	66	IZMX16H3-V10F MO	90000019400499	IZMX16H4-V10F MO	90000019400529
	1250	66	IZMX16H3-V12F MO	90000019400500	IZMX16H4-V12F MO	90000019400530
	1600	66	IZMX16H3-V16F MO	90000019400501	IZMX16H4-V16F MO	90000019400531
	IZMX40	800	66	IZMX40B3-V08F MO	90000019400681	IZMX40B4-V08F MO
1000		66	IZMX40B3-V10F MO	90000019400682	IZMX40B4-V10F MO	90000019400730
1250		66	IZMX40B3-V12F MO	90000019400683	IZMX40B4-V12F MO	90000019400731
1600		66	IZMX40B3-V16F MO	90000019400684	IZMX40B4-V16F MO	90000019400732
2000		66	IZMX40B3-V20F MO	90000019400685	IZMX40B4-V20F MO	90000019400733
2500		66	IZMX40B3-V25F MO	90000019400686	IZMX40B4-V25F MO	90000019400734
3200		66	IZMX40B3-V32F MO	90000019400687	IZMX40B4-V32F MO	90000019400735
4000		66	IZMX40B3-V40F MO	90000019400688	IZMX40B4-V40F MO	90000019400736
800		85	IZMX40N3-V08F MO	90000019400697	IZMX40N4-V08F MO	90000019400745
1000		85	IZMX40N3-V10F MO	90000019400698	IZMX40N4-V10F MO	90000019400746
1250		85	IZMX40N3-V12F MO	90000019400699	IZMX40N4-V12F MO	90000019400747
1600		85	IZMX40N3-V16F MO	90000019400700	IZMX40N4-V16F MO	90000019400748
2000		85	IZMX40N3-V20F MO	90000019400701	IZMX40N4-V20F MO	90000019400749
2500		85	IZMX40N3-V25F MO	90000019400702	IZMX40N4-V25F MO	90000019400750
3200		85	IZMX40N3-V32F MO	90000019400703	IZMX40N4-V32F MO	90000019400751
4000		85	IZMX40N3-V40F MO	90000019400704	IZMX40N4-V40F MO	90000019400752
800		105	IZMX40H3-V08F MO	90000019400713	IZMX40H4-V08F MO	90000019400761
1000		105	IZMX40H3-V10F MO	90000019400714	IZMX40H4-V10F MO	90000019400762
1250		105	IZMX40H3-V12F MO	90000019400715	IZMX40H4-V12F MO	90000019400763
1600		105	IZMX40H3-V16F MO	90000019400716	IZMX40H4-V16F MO	90000019400764
2000		105	IZMX40H3-V20F MO	90000019400717	IZMX40H4-V20F MO	90000019400765
2500		105	IZMX40H3-V25F MO	90000019400718	IZMX40H4-V25F MO	90000019400766
3200		105	IZMX40H3-V32F MO	90000019400719	IZMX40H4-V32F MO	90000019400767
4000		105	IZMX40H3-V40F MO	90000019400720	IZMX40H4-V40F MO	90000019400768

IZMX Series Air Circuit Breakers

IZMX Type Reference List

Manually operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below).

Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-U06F MO	90000019400482	IZMX16B4-U06F MO	90000019400512
	800	42	IZMX16B3-U08F MO	90000019400483	IZMX16B4-U08F MO	90000019400513
	1000	42	IZMX16B3-U10F MO	90000019400484	IZMX16B4-U10F MO	90000019400514
	1250	42	IZMX16B3-U12F MO	90000019400485	IZMX16B4-U12F MO	90000019400515
	1600	42	IZMX16B3-U16F MO	90000019400486	IZMX16B4-U16F MO	90000019400516
	630	50	IZMX16N3-U06F MO	90000019400492	IZMX16N4-U06F MO	90000019400522
	800	50	IZMX16N3-U08F MO	90000019400493	IZMX16N4-U08F MO	90000019400523
	1000	50	IZMX16N3-U10F MO	90000019400494	IZMX16N4-U10F MO	90000019400524
	1250	50	IZMX16N3-U12F MO	90000019400495	IZMX16N4-U12F MO	90000019400873
	1600	50	IZMX16N3-U16F MO	90000019400496	IZMX16N4-U16F MO	90000019400526
	630	66	IZMX16H3-U06F MO	90000019400502	IZMX16H4-U06F MO	90000019400532
	800	66	IZMX16H3-U08F MO	90000019400503	IZMX16H4-U08F MO	90000019400533
	1000	66	IZMX16H3-U10F MO	90000019400504	IZMX16H4-U10F MO	90000019400534
	1250	66	IZMX16H3-U12F MO	90000019400505	IZMX16H4-U12F MO	90000019400535
	1600	66	IZMX16H3-U16F MO	90000019400506	IZMX16H4-U16F MO	90000019400536
	IZMX40	800	66	IZMX40B3-U08F MO	90000019400689	IZMX40B4-U08F MO
1000		66	IZMX40B3-U10F MO	90000019400690	IZMX40B4-U10F MO	90000019400738
1250		66	IZMX40B3-U12F MO	90000019400691	IZMX40B4-U12F MO	90000019400739
1600		66	IZMX40B3-U16F MO	90000019400692	IZMX40B4-U16F MO	90000019400740
2000		66	IZMX40B3-U20F MO	90000019400693	IZMX40B4-U20F MO	90000019400741
2500		66	IZMX40B3-U25F MO	90000019400694	IZMX40B4-U25F MO	90000019400742
3200		66	IZMX40B3-U32F MO	90000019400695	IZMX40B4-U32F MO	90000019400743
4000		66	IZMX40B3-U40F MO	90000019400696	IZMX40B4-U40F MO	90000019400744
800		85	IZMX40N3-U08F MO	90000019400705	IZMX40N4-U08F MO	90000019400753
1000		85	IZMX40N3-U10F MO	90000019400706	IZMX40N4-U10F MO	90000019400754
1250		85	IZMX40N3-U12F MO	90000019400707	IZMX40N4-U12F MO	90000019400755
1600		85	IZMX40N3-U16F MO	90000019400708	IZMX40N4-U16F MO	90000019400756
2000		85	IZMX40N3-U20F MO	90000019400709	IZMX40N4-U20F MO	90000019400757
2500		85	IZMX40N3-U25F MO	90000019400710	IZMX40N4-U25F MO	90000019400758
3200		85	IZMX40N3-U32F MO	90000019400711	IZMX40N4-U32F MO	90000019400759
4000		85	IZMX40N3-U40F MO	90000019400712	IZMX40N4-U40F MO	90000019400760
800		105	IZMX40H3-U08F MO	90000019400721	IZMX40H4-U08F MO	90000019400769
1000		105	IZMX40H3-U10F MO	90000019400722	IZMX40H4-U10F MO	90000019400770
1250		105	IZMX40H3-U12F MO	90000019400723	IZMX40H4-U12F MO	90000019400771
1600		105	IZMX40H3-U16F MO	90000019400724	IZMX40H4-U16F MO	90000019400772
2000		105	IZMX40H3-U20F MO	90000019400725	IZMX40H4-U20F MO	90000019400773
2500		105	IZMX40H3-U25F MO	90000019400726	IZMX40H4-U25F MO	90000019400774
3200		105	IZMX40H3-U32F MO	90000019400727	IZMX40H4-U32F MO	90000019400775
4000		105	IZMX40H3-U40F MO	90000019400728	IZMX40H4-U40F MO	90000019400776

Manually operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below).

Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-V06W MO	90000019400537	IZMX16B4-V06W MO	90000019400567
	800	42	IZMX16B3-V08W MO	90000019400538	IZMX16B4-V08W MO	90000019400568
	1000	42	IZMX16B3-V10W MO	90000019400539	IZMX16B4-V10W MO	90000019400569
	1250	42	IZMX16B3-V12W MO	90000019400540	IZMX16B4-V12W MO	90000019400570
	1600	42	IZMX16B3-V16W MO	90000019400541	IZMX16B4-V16W MO	90000019400571
	630	50	IZMX16N3-V06W MO	90000019400547	IZMX16N4-V06W MO	90000019400577
	800	50	IZMX16N3-V08W MO	90000019400548	IZMX16N4-V08W MO	90000019400578
	1000	50	IZMX16N3-V10W MO	90000019400549	IZMX16N4-V10W MO	90000019400579
	1250	50	IZMX16N3-V12W MO	90000019400550	IZMX16N4-V12W MO	90000019400580
	1600	50	IZMX16N3-V16W MO	90000019400551	IZMX16N4-V16W MO	90000019400581
	630	66	IZMX16H3-V06W MO	90000019400557	IZMX16H4-V06W MO	90000019400587
	800	66	IZMX16H3-V08W MO	90000019400558	IZMX16H4-V08W MO	90000019400588
	1000	66	IZMX16H3-V10W MO	90000019400559	IZMX16H4-V10W MO	90000019400589
	1250	66	IZMX16H3-V12W MO	90000019400560	IZMX16H4-V12W MO	90000019400590
	1600	66	IZMX16H3-V16W MO	90000019400561	IZMX16H4-V16W MO	90000019400591
	IZMX40	800	66	IZMX40B3-V08W MO	90000019400777	IZMX40B4-V08W MO
1000		66	IZMX40B3-V10W MO	90000019400778	IZMX40B4-V10W MO	90000019400826
1250		66	IZMX40B3-V12W MO	90000019400779	IZMX40B4-V12W MO	90000019400827
1600		66	IZMX40B3-V16W MO	90000019400780	IZMX40B4-V16W MO	90000019400828
2000		66	IZMX40B3-V20W MO	90000019400781	IZMX40B4-V20W MO	90000019400829
2500		66	IZMX40B3-V25W MO	90000019400782	IZMX40B4-V25W MO	90000019400830
3200		66	IZMX40B3-V32W MO	90000019400783	IZMX40B4-V32W MO	90000019400831
4000		66	IZMX40B3-V40W MO	90000019400784	IZMX40B4-V40W MO	90000019400832
800		85	IZMX40N3-V08W MO	90000019400793	IZMX40N4-V08W MO	90000019400841
1000		85	IZMX40N3-V10W MO	90000019400794	IZMX40N4-V10W MO	90000019400842
1250		85	IZMX40N3-V12W MO	90000019400795	IZMX40N4-V12W MO	90000019400843
1600		85	IZMX40N3-V16W MO	90000019400796	IZMX40N4-V16W MO	90000019400844
2000		85	IZMX40N3-V20W MO	90000019400797	IZMX40N4-V20W MO	90000019400845
2500		85	IZMX40N3-V25W MO	90000019400798	IZMX40N4-V25W MO	90000019400846
3200		85	IZMX40N3-V32W MO	90000019400799	IZMX40N4-V32W MO	90000019400847
4000		85	IZMX40N3-V40W MO	90000019400800	IZMX40N4-V40W MO	90000019400848
800		105	IZMX40H3-V08W MO	90000019400809	IZMX40H4-V08W MO	90000019400857
1000		105	IZMX40H3-V10W MO	90000019400810	IZMX40H4-V10W MO	90000019400858
1250		105	IZMX40H3-V12W MO	90000019400811	IZMX40H4-V12W MO	90000019400859
1600		105	IZMX40H3-V16W MO	90000019400812	IZMX40H4-V16W MO	90000019400860
2000		105	IZMX40H3-V20W MO	90000019400813	IZMX40H4-V20W MO	90000019400861
2500		105	IZMX40H3-V25W MO	90000019400814	IZMX40H4-V25W MO	90000019400862
3200		105	IZMX40H3-V32W MO	90000019400815	IZMX40H4-V32W MO	90000019400863
4000		105	IZMX40H3-V40W MO	90000019400816	IZMX40H4-V40W MO	90000019400864

IZMX Series Air Circuit Breakers

IZMX Type Reference List

Manually operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below).

Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	IZMX16B3-U06W MO	90000019400542	IZMX16B4-U06W MO	90000019400572
	800	42	IZMX16B3-U08W MO	90000019400543	IZMX16B4-U08W MO	90000019400573
	1000	42	IZMX16B3-U10W MO	90000019400544	IZMX16B4-U10W MO	90000019400574
	1250	42	IZMX16B3-U12W MO	90000019400545	IZMX16B4-U12W MO	90000019400575
	1600	42	IZMX16B3-U16W MO	90000019400546	IZMX16B4-U16W MO	90000019400576
	630	50	IZMX16N3-U06W MO	90000019400552	IZMX16N4-U06W MO	90000019400582
	800	50	IZMX16N3-U08W MO	90000019400553	IZMX16N4-U08W MO	90000019400583
	1000	50	IZMX16N3-U10W MO	90000019400554	IZMX16N4-U10W MO	90000019400584
	1250	50	IZMX16N3-U12W MO	90000019400555	IZMX16N4-U12W MO	90000019400585
	1600	50	IZMX16N3-U16W MO	90000019400556	IZMX16N4-U16W MO	90000019400586
	630	66	IZMX16H3-U06W MO	90000019400562	IZMX16H4-U06W MO	90000019400592
	800	66	IZMX16H3-U08W MO	90000019400563	IZMX16H4-U08W MO	90000019400593
	1000	66	IZMX16H3-U10W MO	90000019400564	IZMX16H4-U10W MO	90000019400594
	1250	66	IZMX16H3-U12W MO	90000019400565	IZMX16H4-U12W MO	90000019400595
1600	66	IZMX16H3-U16W MO	90000019400566	IZMX16H4-U16W MO	90000019400596	
IZMX40	800	66	IZMX40B3-U08W MO	90000019400785	IZMX40B4-U08W MO	90000019400833
	1000	66	IZMX40B3-U10W MO	90000019400786	IZMX40B4-U10W MO	90000019400834
	1250	66	IZMX40B3-U12W MO	90000019400787	IZMX40B4-U12W MO	90000019400835
	1600	66	IZMX40B3-U16W MO	90000019400788	IZMX40B4-U16W MO	90000019400836
	2000	66	IZMX40B3-U20W MO	90000019400789	IZMX40B4-U20W MO	90000019400837
	2500	66	IZMX40B3-U25W MO	90000019400790	IZMX40B4-U25W MO	90000019400838
	3200	66	IZMX40B3-U32W MO	90000019400791	IZMX40B4-U32W MO	90000019400839
	4000	66	IZMX40B3-U40W MO	90000019400792	IZMX40B4-U40W MO	90000019400840
	800	85	IZMX40N3-U08W MO	90000019400801	IZMX40N4-U08W MO	90000019400849
	1000	85	IZMX40N3-U10W MO	90000019400802	IZMX40N4-U10W MO	90000019400850
	1250	85	IZMX40N3-U12W MO	90000019400803	IZMX40N4-U12W MO	90000019400851
	1600	85	IZMX40N3-U16W MO	90000019400804	IZMX40N4-U16W MO	90000019400852
	2000	85	IZMX40N3-U20W MO	90000019400805	IZMX40N4-U20W MO	90000019400853
	2500	85	IZMX40N3-U25W MO	90000019400806	IZMX40N4-U25W MO	90000019400854
	3200	85	IZMX40N3-U32W MO	90000019400807	IZMX40N4-U32W MO	90000019400855
	4000	85	IZMX40N3-U40W MO	90000019400808	IZMX40N4-U40W MO	90000019400856
	800	105	IZMX40H3-U08W MO	90000019400817	IZMX40H4-U08W MO	90000019400865
	1000	105	IZMX40H3-U10W MO	90000019400818	IZMX40H4-U10W MO	90000019400866
	1250	105	IZMX40H3-U12W MO	90000019400819	IZMX40H4-U12W MO	90000019400867
	1600	105	IZMX40H3-U16W MO	90000019400820	IZMX40H4-U16W MO	90000019400868
	2000	105	IZMX40H3-U20W MO	90000019400821	IZMX40H4-U20W MO	90000019400869
	2500	105	IZMX40H3-U25W MO	90000019400822	IZMX40H4-U25W MO	90000019400870
	3200	105	IZMX40H3-U32W MO	90000019400823	IZMX40H4-U32W MO	90000019400871
	4000	105	IZMX40H3-U40W MO	90000019400824	IZMX40H4-U40W MO	90000019400872

Manually operated standard device includes:

Fixed parent breaker, including 2a2b Aux contact, Main terminal adapter – horizontal (3200A and below).

Switch Disconnecter, Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	INX16B3-06F MO	90000019400457	INX16B4-06F MO	90000019400462
	800	42	INX16B3-08F MO	90000019400458	INX16B4-08F MO	90000019400463
	1000	42	INX16B3-10F MO	90000019400459	INX16B4-10F MO	90000019400464
	1250	42	INX16B3-12F MO	90000019400460	INX16B4-12F MO	90000019400465
	1600	42	INX16B3-16F MO	90000019400461	INX16B4-16F MO	90000019400466
IZMX40	800	66	INX40B3-08F MO	90000019400597	INX40B4-08F MO	90000019400613
	1000	66	INX40B3-10F MO	90000019400598	INX40B4-10F MO	90000019400614
	1250	66	INX40B3-12F MO	90000019400599	INX40B4-12F MO	90000019400615
	1600	66	INX40B3-16F MO	90000019400600	INX40B4-16F MO	90000019400616
	2000	66	INX40B3-20F MO	90000019400601	INX40B4-20F MO	90000019400617
	2500	66	INX40B3-25F MO	90000019400602	INX40B4-25F MO	90000019400618
	3200	66	INX40B3-32F MO	90000019400603	INX40B4-32F MO	90000019400619
	4000	66	INX40B3-40F MO	90000019400604	INX40B4-40F MO	90000019400620
	800	85	INX40N3-08F MO	90000019400605	INX40N4-08F MO	90000019400621
	1000	85	INX40N3-10F MO	90000019400606	INX40N4-10F MO	90000019400622
	1250	85	INX40N3-12F MO	90000019400607	INX40N4-12F MO	90000019400623
	1600	85	INX40N3-16F MO	90000019400608	INX40N4-16F MO	90000019400624
	2000	85	INX40N3-20F MO	90000019400609	INX40N4-20F MO	90000019400625
	2500	85	INX40N3-25F MO	90000019400610	INX40N4-25F MO	90000019400626
	3200	85	INX40N3-32F MO	90000019400611	INX40N4-32F MO	90000019400627
	4000	85	INX40N3-40F MO	90000019400612	INX40N4-40F MO	90000019400628

IZMX Series Air Circuit Breakers

INX Type Reference List

Manually operated standard device includes:

Withdrawable parent breaker, including 2a2b Aux contact, Cassette(2000A and below), Safety shutters, Main terminal adapter – horizontal (3200A and below).

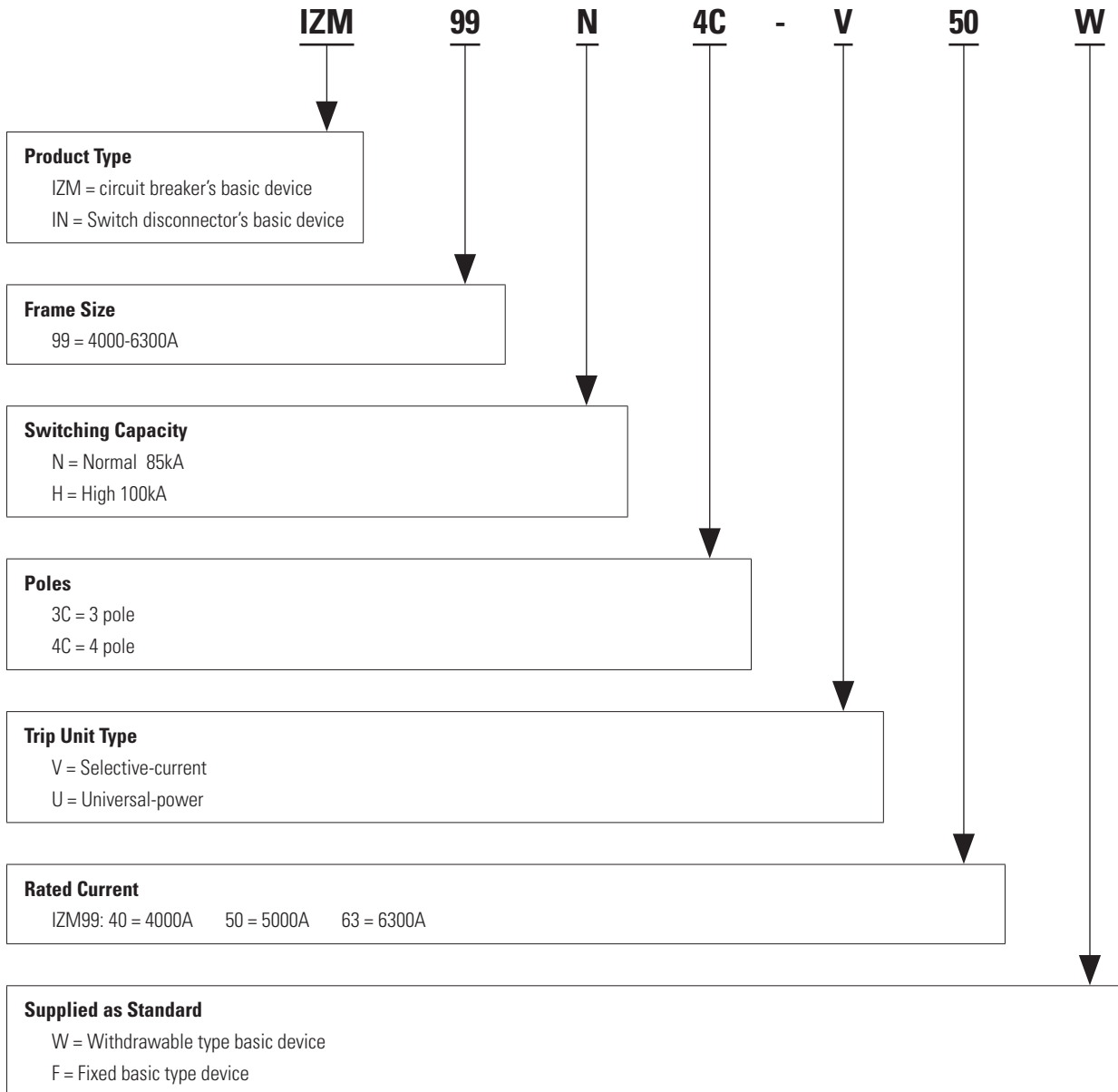
Switch Disconnecter, Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZMX16	630	42	INX16B3-06W MO	90000019400467	INX16B4-06W MO	90000019400472
	800	42	INX16B3-08W MO	90000019400468	INX16B4-08W MO	90000019400473
	1000	42	INX16B3-10W MO	90000019400469	INX16B4-10W MO	90000019400474
	1250	42	INX16B3-12W MO	90000019400470	INX16B4-12W MO	90000019400475
	1600	42	INX16B3-16W MO	90000019400471	INX16B4-16W MO	90000019400476
IZMX40	800	66	INX40B3-08W MO	90000019400629	INX40B4-08W MO	90000019400645
	1000	66	INX40B3-10W MO	90000019400630	INX40B4-10W MO	90000019400646
	1250	66	INX40B3-12W MO	90000019400631	INX40B4-12W MO	90000019400647
	1600	66	INX40B3-16W MO	90000019400632	INX40B4-16W MO	90000019400648
	2000	66	INX40B3-20W MO	90000019400633	INX40B4-20W MO	90000019400649
	2500	66	INX40B3-25W MO	90000019400634	INX40B4-25W MO	90000019400650
	3200	66	INX40B3-32W MO	90000019400635	INX40B4-32W MO	90000019400651
	4000	66	INX40B3-40W MO	90000019400636	INX40B4-40W MO	90000019400652
	800	85	INX40N3-08W MO	90000019400637	INX40N4-08W MO	90000019400653
	1000	85	INX40N3-10W MO	90000019400638	INX40N4-10W MO	90000019400654
	1250	85	INX40N3-12W MO	90000019400639	INX40N4-12W MO	90000019400655
	1600	85	INX40N3-16W MO	90000019400640	INX40N4-16W MO	90000019400656
	2000	85	INX40N3-20W MO	90000019400641	INX40N4-20W MO	90000019400657
	2500	85	INX40N3-25W MO	90000019400642	INX40N4-25W MO	90000019400658
	3200	85	INX40N3-32W MO	90000019400643	INX40N4-32W MO	90000019400659
	4000	85	INX40N3-40W MO	90000019400644	INX40N4-40W MO	90000019400660

New Generation Air Circuit Breaker IZM99

Breaker Catalog Number

IZM9 Series Air Circuit Breaker Catalog Number (IZM9-W or IZM9-F)



Fixed type

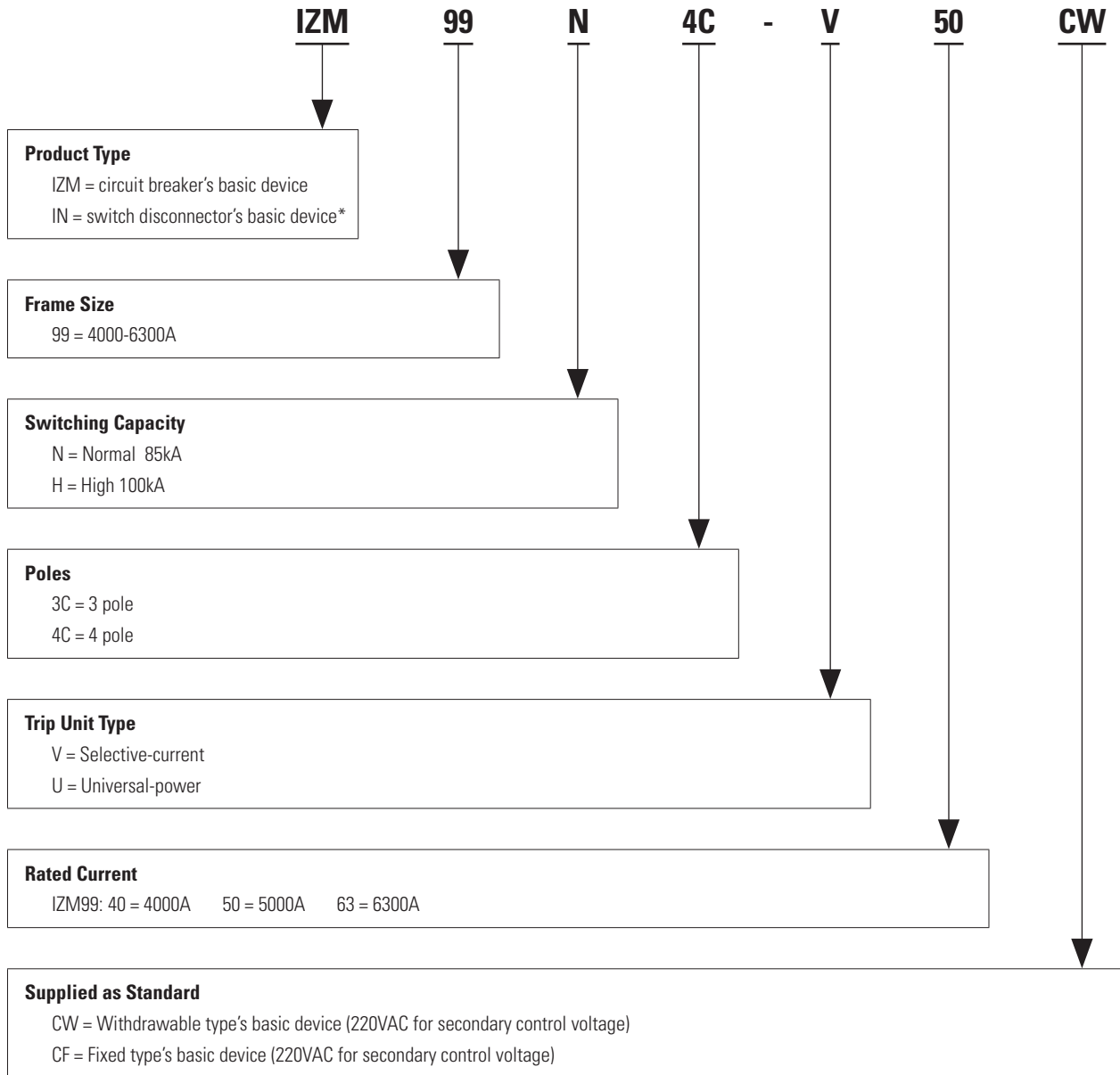
Standard IZM99 basic device includes: fixed circuit breaker's basic device, wiring terminal, auxiliary contact (4a4b), door escutcheon, 220VAC/DC power supply module

Withdrawable type

Standard IZM99 basic device includes: withdrawable circuit breaker's basic device, wiring terminal, auxiliary contact (4a4b), door escutcheon, 220VAC/DC power supply module

Note: IZM99-W/F includes horizontal main terminals
IZM99-W/F only provide the necessary control terminals as required

IZM9 Series Air Circuit Breaker Catalog Number (Supplied As standard) (IZM9-CW or IZM9-CF)



Fixed type

Standard fixed type basic device includes: fixed circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220V AC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module

Withdrawable type

Standard withdrawable type basic device includes: withdrawable circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220VAC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module, protection shutter, arc chamber cover, cassette, handle

Note: CW/CF is dedicated to 220VAC control voltage, one tailored type under W/F, so W/F is marked on the nametag of the circuit breaker's basic device, rather than CW/CF
IZM99-CW/CF includes horizontal main terminals
IZM99-CW/CF only provide the necessary control terminals as required

New Generation Air Circuit Breaker IZM99

Breaker Technical Data



IZM99/IN99²⁾

General			
Standards	IEC/EN 60947		
Ambient temperature	Storage	°C	-25 - 85
	Operating (open)	°C	-25 - 85
Mounting position			
Utilization category	B		
Protection type	IP20		
Environment humidity	Comply with GB / T2423.4 Alternating Humidity and Heat Test +55 °C, Relative Humidity 95%, Non-condensing (exceeding standards, cabinet needs to be protected)		
Direction of incoming supply	as required		
Switching capacity			
Rated Current (I_n)	4000A, 5000A, 6300A		
Type of circuit breaker	N		H
Rated impulse withstand voltage (U_{imp} , VAC)	12000		12000
Rated insulation voltage (U_i , VAC)	1000		1000
Rated operational voltage (U_e , VAC)	690		690
Ultimate breaking capacity (I_{cu} , kA)	440V 50/60Hz	85	100
	690V 50/60Hz	85	100
Rated service breaking capacity (I_{cs} , kA)	440V 50/60Hz	85	100
	690V 50/60Hz	85	100
Rated short-time withstand current (I_{cw} , kA)	1s	85	100
Rated short-circuit making capacity (I_{cm} , kA)	440V 50/60Hz	187	220
	690V 50/60Hz	187	220
Operating delays (ms)	Closing delay	35	
	Opening delay	30	
Maximum operating frequency (Operations/h)	60		
Durability and installation characteristics			
Lifespan			4000-6300A
	Mechanical, w/o maintenance	5000	
	Mechanical, w/maintenance	10000	
	Electrical, w/o maintenance	3000	
Dimensions (H × W × D, mm)	Fixed 3P	461 × 907 × 372	
	Fixed 4P	461 × 1161 × 372	
	Withdrawable 3P	486 × 926 × 474	
	Withdrawable 4P	486 × 1180 × 474	
Weight (kg)	Fixed 3P/4P	125/163	
	Withdrawable 3P/4P	157/200	

Notes: ¹⁾ 5000 operations at 4000A



V Type (PXR20)
IZM-PXR V
IZM99...V



U Type (PXR25)
IZM-PXR U
IZM99...U

Protective options	LSI; LSIG/LSIA (Optional)	LSI; LSIG/LSIA (Optional)
Overload protection (L)		
Overload trip (I_r), $\times I_n$	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 0.95, 0.98, 1.0	0.4, 0.5, 0.6, 0.7, 0.75, 0.8, 0.9, 0.95, 0.98, 1.0
Long delay time t_r ($6 \times I_r$)	0.5, 1, 2, 4, 7, 10, 12, 15, 20, 24 s	0.5, 1, 2, 4, 7, 10, 12, 15, 20, 24 s
Short-time delayed short-circuit protection (S)		
Short delayed pickup (I_{sd}), $\times I_r$	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 10	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 10
Short delay time, flat characteristic curve (t_{sd})	0.0, 0.1, 0.2, 0.3, 0.4, 0.5 s ¹⁾	0.0, 0.1, 0.2, 0.3, 0.4, 0.5 s ¹⁾
Short delay time at $8 \times I_r$, I ² t curve (t_{sd})	0.1, 0.3, 0.4, 0.5 s	0.1, 0.3, 0.4, 0.5 s
Non-delayed short-circuit protection (I)		
Non-delayed pickup (I_i), $\times I_n$	OFF, 2, 4, 5, 6, 7, 8, 10, 12, 15	OFF, 2, 4, 5, 6, 7, 8, 10, 12, 15
Optional ground fault protection (G)		
Ground/Earth fault alarm (A), $\times I_n$	0.2, 0.4, 0.6, 1.0	0.2, 0.4, 0.6, 1.0
Ground/Earth pickup (I_g), $\times I_n$	OFF, 0.2, 0.4, 0.6, 0.8, 1.0	OFF, 0.2, 0.4, 0.6, 0.8, 1.0
Short delay time, flat characteristic curve (t_g)	0.1, 0.2, 0.3, 0.4, 0.5 s	0.1, 0.2, 0.3, 0.4, 0.5 s
Short delay time at $0.625 \times I_n$, I ² t curve (t_g)	0.1, 0.2, 0.3, 0.4, 0.5 s	0.1, 0.2, 0.3, 0.4, 0.5 s
Over-temperature trip	●	●
Thermal memory	●	●
Zone selectivity ZSI	●	●
Making current release (MCR)	●	●
Protective functions		
System diagnostic		
Status/Overload LED	●	●
Cause of trip LEDs	●	●
Current at trip point (display indication)	●	●
High load or ground fault alarm contact	●	●
System monitor		
LCD display	● ²⁾	● ²⁾
Current metering accuracy	$\pm 1\%$ of Reading	$\pm 1\%$ of Reading
Voltage (%) L to L	–	$\pm 1\%$ of Reading ³⁾
Power and energy (%)	–	$\pm 2\%$ of Reading ³⁾
Apparent power kVA and demand	–	● ³⁾
Reactive power kVAR	–	● ³⁾
Power factor	–	● ³⁾
Communications		
Onboard (ModBus)	○	●
External (CAM Module)	○	○
Power supply requirement	+24 V DC, optional	+24 V DC, optional
Additional functions		
Test Capability	Integral	Integral
Maintenance Mode ARMS (Arc Flash Reduction Maintenance System™)	○	○
Trip log	●	●
Electronic operations counter	●	●
Waveform capture	●	●
Breaker health monitor	●	●

Notes: ¹⁾ 0.1s: trip time is 0.06s to 0.1s; 0s: nominal clear time is 60ms with auxiliary power and 120ms without.

²⁾ Requires external 24VDC control voltage supply when continuous current below 20% of I_n

³⁾ Requires external PT module (ZMC2-PXR-PTM-2) for voltage sensing input to trip unit

● Standard

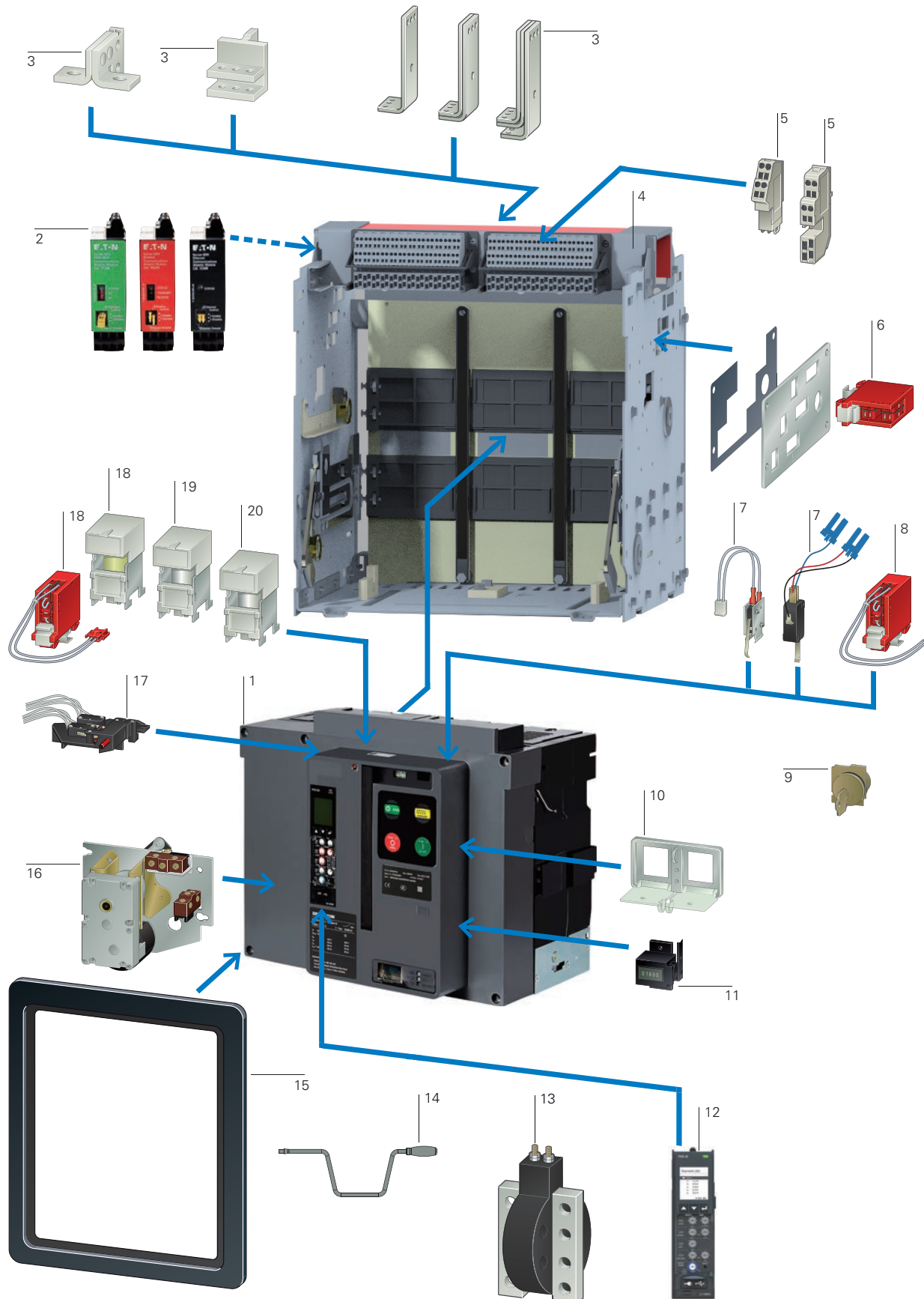
○ Optional

– not available

New Generation Air Circuit Breaker IZM99

System Overview

IZM99 Circuit-breakers and Accessori



1 IZM99 air circuit breaker	9 Key locking Locking of the breaker by a keylock.	16 Motor operator To store energy for closing release
2 Communication modules Profibus DP, Ethernet and Modbus onboard	10 Button cover Plastic or metal	17 Red-pop trip indicator Red-pop trip indicator signals a trip by the trip unit Included in breaker with trip unit Trip signal auxiliary contact OTS, 2CO
3 Main circuit wiring terminal Vertical wiring terminal 3/4P Front wiring terminal 3/4P	11 Switching operations counters Counts the number of operations	18 Shunt releases Opens the breaker by an electrical signal.
4 Cassette	12 Trip unit PXR20, V-type, current metering PXR25, U-type, power metering Cannot be ordered separately	19 Closing releases Closes the breaker by an electrical signal.
5 Secondary circuit wiring terminal 8, 20, 30 secondary circuit wiring terminals can be ordered	13 Current sensor for neutral conductor Current sensor for sensing the neutral-conductor current.	20 Undervoltage releases Opens the breaker by a voltage-drop in the control circuit
6 Position cell switches Cell switch signals the position of the breaker inside of the cassette. Connect, Test and Disconnect Position	14 Levering tool Lev-in tool to move the breaker in and out of the cassette. Standard Omega shaped handle is included in D/O breaker	
7 Latch check switch For external application Usage For use with closing release	15 Door escutcheon Closes the gap between Breaker and Switchgear-door. IP31 included in breaker For IP54	
8 Standard auxiliary contact Signaling switch ON-OFF. 4 ONs and 4 OFFs standard. 12 ONs and 12 OFFs maximum		

Model coding

IZM	99	N	3	C	-	V	40	W
IN	99	H	4			U	50	F
							63	

IZM, IN = air circuit breaker, switch disconnecter




Circuit breaker frame	Switching capacity	3 pole	Trip unit	Rated current	Circuit breaker type
99: Double frame 4000-6300 A	B = Basic	4 pole	V = Ammeter type	40: 4000 A	W = Withdrawable
	N = Standard		U = Power meter type	50: 5000 A	F = Fixed
	H = High			63: 6300 A	

Notes: IZM99 busbar sequence: (NN)AABBCC
No IN99H




New Generation Air Circuit Breaker IZM99

IZM99 Circuit Breaker Basic Device

3P Circuit Breakers of Ammeter Type (Including Type V Trip Unit, 4ON/4OFF auxiliary Contacts, Main Wiring Terminal, Some Secondary Terminal Blocks and Power Module)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.	
			Delayed $I_{sd} = I_r \times \dots$	Non-delayed $I_i = I_n \times \dots$			
							
85	4000	IZM99	1600-4000	1.5-10	2-15,0FF	IZM99N3C-V40F YC-301354	IZM99N3C-V40W YC-301390
85	5000	IZM99	2000-5000	1.5-10	2-15,0FF	IZM99N3C-V50F YC-301355	IZM99N3C-V50W YC-301391
85	6300	IZM99	2520-6300	1.5-10	2-15,0FF	IZM99N3C-V63F YC-301356	IZM99N3C-V63W YC-301392
100	4000	IZM99	1600-4000	1.5-10	2-15,0FF	IZM99H3C-V40F YC-301357	IZM99H3C-V40W YC-301393
100	5000	IZM99	2000-5000	1.5-10	2-15,0FF	IZM99H3C-V50F YC-301358	IZM99H3C-V50W YC-301394
100	6300	IZM99	2520-6300	1.5-10	2-15,0FF	IZM99H3C-V63F YC-301359	IZM99H3C-V63W YC-301395




3P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 4ON/4OFF Auxiliary Contacts, Main Wiring Terminal, Some Secondary Terminal Blocks and Power Module)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range Overload releases I_r A	Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.	
			Delayed $I_{sd} = I_r \times \dots$	Non-delayed $I_i = I_n \times \dots$			
							
85	4000	IZM99	1600-4000	1.5-10	2-15,0FF	IZM99N3C-U40F YC-301360	IZM99N3C-U40W YC-301396
85	5000	IZM99	2000-5000	1.5-10	2-15,0FF	IZM99N3C-U50F YC-301361	IZM99N3C-U50W YC-301397
85	6300	IZM99	2520-6300	1.5-10	2-15,0FF	IZM99N3C-U63F YC-301362	IZM99N3C-U63W YC-301398
100	4000	IZM99	1600-4000	1.5-10	2-15,0FF	IZM99H3C-U40F YC-301363	IZM99H3C-U40W YC-301399
100	5000	IZM99	2000-5000	1.5-10	2-15,0FF	IZM99H3C-U50F YC-301364	IZM99H3C-U50W YC-301400
100	6300	IZM99	2520-6300	1.5-10	2-15,0FF	IZM99H3C-U63F YC-301365	IZM99H3C-U63W YC-301401




New Generation Air Circuit Breaker IZM99

IZM99 Circuit Breaker Basic Device

4P Circuit Breaker of Ammeter Type (Including Type V Trip Unit, 4ON/4OFF Auxiliary Contacts, Main Wiring Terminal, Some Secondary Terminal Blocks and Power Module)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range Overload releases	Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.
			Delayed $I_{sd} = I_n \times \dots$	Non-delayed $I_i = I_n \times \dots$		
						Cassette must be ordered separately.
85	4000	IZM99 1600-4000	1.5-10	2-15, OFF	IZM99N4C-V40F YC-301372	IZM99N4C-V40W YC-301408
85	5000	IZM99 2000-5000	1.5-10	2-15, OFF	IZM99N4C-V50F YC-301373	IZM99N4C-V50W YC-301409
85	6300	IZM99 2520-6300	1.5-10	2-15, OFF	IZM99N4C-V63F YC-301374	IZM99N4C-V63W YC-301410
100	4000	IZM99 1600-4000	1.5-10	2-10, OFF	IZM99H4C-V40F YC-301375	IZM99H4C-V40W YC-301411
100	5000	IZM99 2000-5000	1.5-10	2-10, OFF	IZM99H4C-V50F YC-301376	IZM99H4C-V50W YC-301412
100	6300	IZM99 2520-6300	1.5-10	2-10, OFF	IZM99H4C-V63F YC-301377	IZM99H4C-V63W YC-301413

4P Circuit Breaker of Power Meter Type (Including Type U Trip Unit, 4ON/4OFF Auxiliary Contacts, Main Wiring Terminal, Some Secondary Terminal Blocks and Power Module)

Switching capacity I_{cu}/I_{cs} kA	Rated operational current $I_n = I_u$ A	Setting range Overload releases	Short-circuit releases		Fixed Part no. Article no.	Withdrawable Part no. Article no.
			Delayed $I_{sd} = I_n \times \dots$	Non-delayed $I_i = I_n \times \dots$		
						Cassette must be ordered separately.
85	4000	IZM99 1600-4000	1.5-10	2-10, OFF	IZM99N4C-U40F YC-301378	IZM99N4C-U40W YC-301414
85	5000	IZM99 2000-5000	1.5-10	2-10, OFF	IZM99N4C-U50F YC-301379	IZM99N4C-U50W YC-301415
85	6300	IZM99 2520-6300	1.5-10	2-10, OFF	IZM99N4C-U63F YC-301380	IZM99N4C-U63W YC-301416
100	4000	IZM99 1600-4000	1.5-10	2-10, OFF	IZM99H4C-U40F YC-301381	IZM99H4C-U40W YC-301417
100	5000	IZM99 2000-5000	1.5-10	2-10, OFF	IZM99H4C-U50F YC-301382	IZM99H4C-U50W YC-301418
100	6300	IZM99 2520-6300	1.5-10	2-10, OFF	IZM99H4C-U63F YC-301383	IZM99H4C-U63W YC-301419

New Generation Air Circuit Breaker IZM99

IN99 Switch Disconnecter Basic Device

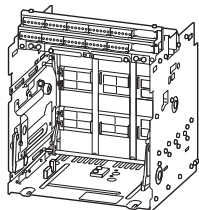
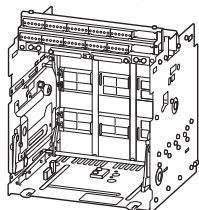
Switch Disconnecter (Including 4ON/4OFF Auxiliary Contacts, Main Wiring Terminal and Some Secondary Terminal Blocks)

Rated short-circuit making capacity	Rated operational current	Circuit breaker type	Rated short-time withstand current	Fixed	Withdrawable
I_{cm} kA	$I_n = I_u$ A		I_{cw} kA	Part no. Article no.	Part no. Article no.
187	4000	IN99	85	IN99N3C-40F YC-302061	IN99N3C-40W YC-302073
187	5000	IN99	85	IN99N3C-50F YC-302062	IN99N3C-50W YC-302074
187	6300	IN99	85	IN99N3C-63F YC-302063	IN99N3C-63W YC-302075
220	4000	IN99	100	IN99H3C-40F YC-302064	IN99H3C-40W YC-302076
220	5000	IN99	100	IN99H3C-50F YC-302065	IN99H3C-50W YC-302077
220	6300	IN99	100	IN99H3C-63F YC-302066	IN99H3C-63W YC-302078
187	4000	IN99	85	IN99N4C-40F YC-302067	IN99N4C-40W YC-302079
187	5000	IN99	85	IN99N4C-50F YC-302068	IN99N4C-50W YC-302080
187	6300	IN99	85	IN99N4C-63F YC-302069	IN99N4C-63W YC-302081
220	4000	IN99	100	IN99H4C-40F YC-302070	IN99H4C-40W YC-302082
220	5000	IN99	100	IN99H4C-50F YC-302071	IN99H4C-50W YC-302083
220	6300	IN99	100	IN99H4C-63F YC-302072	IN99H4C-63W YC-302084

Cassette must be ordered separately.

Cassette

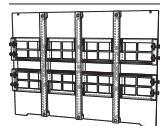
	Rated operational current I_n A	Pole	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device
Cassettes ordered with basic device Standard cassette equipment: - Arc chamber cover - Mismatch protection - Main terminal for horizontal connection - Door escutcheon - No secondary control terminal module, to be ordered separately	4000	3	IZM99...W IN99..W	+IZMC2-CAS633-4000 YC-300080
	5000-6300	3	IZM99...W IN99..W	+IZMC2-CAS633-6300 YC-300081
	4000	4	IZM99...W IN99..W	+IZMC2-CAS634-4000 YC-300066
	5000-6300	4	IZM99...W IN99..W	+IZMC2-CAS634-6300 YC-300067
Cassettes ordered with basic device Standard cassette equipment: - Arc chamber cover - Mismatch protection - Main terminal for horizontal connection - Door escutcheon - Safety Shutter	4000	3	IZM99...W IN99..W	IZMC2-CAS633-4000 YC-500080
	5000-6300	3	IZM99...W IN99..W	IZMC2-CAS633-6300 YC-500081
	4000	4	IZM99...W IN99...W	IZMC2-CAS634-4000 YC-500066
	5000-6300	4	IZM99...W IN99...W	IZMC2-CAS634-6300 YC-500067



New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

Cassette Safety Shutters

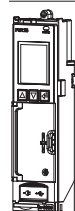


	Pole	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device
When the breaker is withdrawn from its connected position, the shutters automatically cover the cassette's live main terminals.			
-	3	IZM99...W IN99...W	+IZMC2-SH633 YC-300098
-	4	IZM99...W IN99...W	+IZMC2-SH634 YC-300069

IZMC2-PXRV..., IZMC2-PXRU Trip Unit



	For use with	Ground Earth-Fault Protection (G)	ARMS (M)	Onboard ModBUS Communication (C)	Part no. Article no. Suffix + for ordering with circuit breaker basic device
Type V trip unit with current metering (PXR20)					
	-	-	-	-	IZMC2-PXRV
Add-on functions for current metering Type V (PXR20)					
Add onboard Modbus, V type	IZM99	-	-	●	+IZMC2-PXRV-C YC-300058
Add ground fault protection, V type	IZM99	●	-	-	+IZMC2-PXRV-G YC-300057
Add ground fault protection and onboard Modbus, V type	IZM99	●	-	●	+IZMC2-PXRV-GC YC-300056
Add ground fault protection and ARMs, V type	IZM99	●	●	-	+IZMC2-PXRV-GM YC-300055
Add ground fault protection, onboard Modbus and ARMs, V type	IZM99	●	●	●	+IZMC2-PXRV-GMC YC-300054

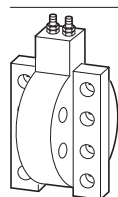


Type U Trip Unit with Power Metering (PXR25)					
Onboard ModBUS is standard on all PXR25 trip units	-	-	-	●	IZMC2-PXRU
Add-on functions for power metering Type U (PXR25)					
Add ground fault protection, U type	IZM99	●	-	●	+IZMC2-PXRU-G YC-300059
Add ARMs, U type	IZM99	-	●	●	+IZMC2-PXRU-M YC-300060
Add ground fault protection and ARMs, U type	IZM99	●	●	●	+IZMC2-PXRU-GM YC-300061

Accessories for Electronic Releases

	For use with	Rated control voltage U_s V	Part no. Article no.	Notes
External trip unit power adapter				
External trip unit power adapter	IZM99...	85-264VAC, 120-370VDC input 24VDC, 1.5A output	EASY400-POW-CN 90000019400525	DIN rail mount Order separately
External voltage measurement module, for U type release unit	IZM99...	–	IZMC2-PXR-PTM-2 YC-500160	
Communication modules				
Communication module Modbus	IZM99...	–	IZMC2-MCAM-2 YC-500119	DIN rail mount Order separately
Communication module Profibus DP	IZM99...	–	IZMC2-PCAM-2 YC-500120	
Communication module Ethernet	IZM99...	–	IZMC2-ECAM-2 YC-500121	

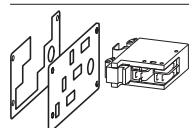
External Neutral Transformer



	Rated current I_n A	For use with	Part no. Article no.
Current sensor for neutral conductor on 3-pole circuit-breakers			
For IZM99 ¹⁾ Externally mounted neutral sensor for residual ground.	–	IZM99...	IZMC2-CT40-N-2 YC-500102

Notes: ¹⁾IZM99 requires two orders.

Position Indication Contact for Withdrawable Circuit Breaker



	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device
For remote indication of circuit breaker's position in the cassette. Maximum three sets of withdrawer position indication contacts (each set includes 4 indication contacts) can be installed. Each withdrawer only requires one mounting support.		
4CO, 1 module with mounting	IZM99...W IN99...W	IZMC2-CS4MB YC-500122
8CO, 2 module with mounting	IZM99...W IN99...W	IZMC2-CS8MB YC-500123
12CO, 3 module with mounting	IZM99...W IN99...W	IZMC2-CS12MB YC-500124

New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

Motor Operator

Rated control voltage
 U_s
 V

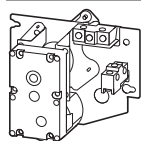
For use with

Part no.

Article no.

Suffix + for ordering with circuit breaker basic device

Instructions

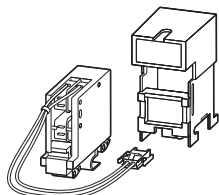


It can store energy by motor. When motor operator operates, it requires additionally a closing release and a shunt release. The “Spring energy store tensioned” status indication switch is also included.

24VDC	IZM99 IN99...	IZMC2-M24DC YC-500027	If ordered separately for upgrade, need to order 1 separate for the control secondary terminal block
24VDC	IZM99 IN99...	+IZMC2-M24DC YC-300027	
48VDC	IZM99 IN99...	IZMC2-M48DC YC-500028	
48VDC	IZM99 IN99...	+IZMC2-M48DC YC-300028	
110-125VDC	IZM99 IN99...	IZMC2-M110DC YC-500029	
110-125VDC	IZM99 IN99...	+IZMC2-M110DC YC-300029	
220-250VDC	IZM99 IN99...	IZMC2-M220DC YC-500030	
220-250VDC	IZM99 IN99...	+IZMC2-M220DC YC-300030	
110-127VAC	IZM99 IN99...	IZMC2-M110AC YC-500031	
110-127VAC	IZM99 IN99...	+IZMC2-M110AC YC-300031	
208-240VAC	IZM99 IN99...	IZMC2-M230AC (for 220V DC) YC-500032	
208-240VAC	IZM99 IN99...	+IZMC2-M230AC (for 220V DC) YC-300032	

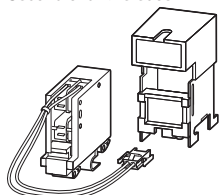
Shunt Release

Shunt release



Rated control voltage U_s V	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Instructions
24DC	IZM99... IN99...	IZMC2-ST24DC YC-500006	If ordered separately for upgrade, need to order 1 separate for the control secondary terminal block
24DC	IZM99... IN99...	+IZMC2-ST24DC YC-300006	
48DC	IZM99... IN99...	IZMC2-ST48DC YC-500007	
48DC	IZM99... IN99...	+IZMC2-ST48DC YC-300007	
110-125 DC 110-127 AC	IZM99... IN99...	IZMC2-ST110AD YC-500008	
110-125 DC 110-127 AC	IZM99... IN99...	+IZMC2-ST110AD YC-300008	
220-250 DC 208-240 AC	IZM99... IN99...	IZMC2-ST230AD YC-500009	
220-250 DC 208-240 AC	IZM99... IN99...	+IZMC2-ST230AD YC-300009	

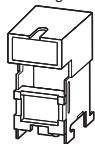
Second shunt release



Cannot be combined with an undervoltage release.			
24DC	IZM99... IN99...	IZMC2-ST24DC YC-500022	
24DC	IZM99... IN99...	+IZMC2-ST24DC YC-300022	
48DC	IZM99... IN99...	IZMC2-ST48DC YC-500023	
48DC	IZM99... IN99...	+IZMC2-ST48DC YC-300023	
110-125 DC 110-127 AC	IZM99... IN99...	IZMC2-ST110AD YC-500024	
110-125 DC 110-127 AC	IZM99... IN99...	+IZMC2-ST110AD YC-300024	
220-250 DC 208-240 AC	IZM99... IN99...	IZMC2-ST230AD YC-500025	
220-250 DC 208-240 AC	IZM99... IN99...	+IZMC2-ST230AD YC-300025	

Closing Releases

Closing releases

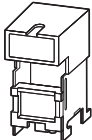


Rated control voltage U_s V	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Instructions
24DC	IZM99... IN99...	IZMC2-SR24DC YC-500001	If ordered separately for upgrade, need to order 1 separate for the control secondary terminal block
24DC	IZM99... IN99...	+IZMC2-SR24DC YC-300001	
48DC	IZM99... IN99...	IZMC2-SR48DC YC-500002	
48DC	IZM99... IN99...	+IZMC2-SR48DC YC-300002	
110-125 DC 110-127 AC	IZM99... IN99...	IZMC2-SR110AD YC-500003	
110-125 DC 110-127 AC	IZM99... IN99...	+IZMC2-SR110AD YC-300003	
220-250 DC 208-240 AC	IZM99... IN99...	IZMC2-SR230AD YC-500004	
220-250 DC 208-240 AC	IZM99... IN99...	+IZMC2-SR230AD YC-300004	

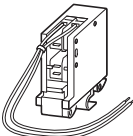
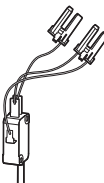
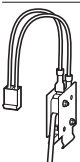
New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

Undervoltage Release

	Rated control voltage U_s V	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Instructions
Undervoltage release Can not be used in combination With 2nd shunt release 	24 DC	IZM99... IN99...	IZM-UVR24DC YC-500011	If ordered separately for upgrade, need to order 1 separate for the control secondary terminal block
	24 DC	IZM99... IN99...	+IZM-UVR24DC YC-300011	
	48 DC	IZM99... IN99...	IZMC2-UVR48DC YC-500013	
	48 DC	IZM99... IN99...	+IZMC2-UVR48DC YC-300013	
	110-125 DC	IZM99... IN99...	IZMC2-UVR110DC YC-500014	
	110-125 DC	IZM99... IN99...	+IZMC2-UVR110DC YC-300014	
	220-250 DC	IZM99... IN99...	IZMC2-UVR220DC YC-500015	
	220-250 DC	IZM99... IN99...	+IZMC2-UVR220DC YC-300015	
	110-127 AC	IZM99... IN99...	IZMC2-UVR110AC YC-500016	
	110-127 AC	IZM99... IN99...	+IZMC2-UVR110AC YC-300016	
	208-240 AC	IZM99... IN99...	IZMC2-UVR230AC YC-500017	
	208-240 AC	IZM99... IN99...	+IZMC2-UVR230AC YC-300017	
	380-415 AC	IZM99... IN99...	IZMC2-UVR400AC YC-500018	
	Time-delay module In use with undervoltage module. Time setting: 0.1s, 0.5s, 1.0s, 2.0s.	120 AC	IZM99... IN99...	
230 AC		IZM99... IN99...	IZMC2-UVR-TD-230AC YC-500101	

Auxiliary Contacts

	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Notes	
	Auxiliary contact 4 ONs and 4 OFFs are supplied as standard IZM 99: a maximum of 8 ONs and 8 OFs available (with additional AS44-1, 2nd group), 12 ONs and 12 OFFs (with additional 2 AS44, 2nd and 3rd group)			
	4CO	IZM99... IN99...	IZMC2-AS44-2 YC-500034	2nd group auxiliary 4 ONs and 4 OFFs
	4CO	IZM99... IN99...	+IZMC2-AS44 YC-300034	Additional 2nd group auxiliary 4 ONs and 4 OFFs
	4CO	IZM99... IN99...	IZMC2-AS44-3 YC-500035	3rd group auxiliary 4 ONs and 4 OFFs
	4CO	IZM99... IN99...	+IZMC2-AS88 YC-300035	Additional 2nd and 3rd group auxiliary 8 ONs and 8 OFFs
Latch check switch Latch check switch = latch check signal with 1 convertible contact (1CO)				
	-	IZM99... IN99...	IZMC2-LCS-SR YC-500036	For connection to closing release
	-	IZM99... IN99...	+IZMC2-LCS-SR YC-300036	
	-	IZM99... IN99...	IZMC2-LCS YC-500037	For external signal
	-	IZM99... IN99...	+IZMC2-LCS YC-300037	

Notes: Accessories attached to the secondary terminals, if ordered separately for upgrade, need to order the corresponding number of separate secondary terminal blocks.

Collapsible Hand Lever

Standard Omega shaped handle is included in D/O breaker.

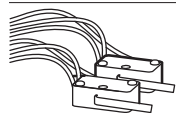
	For use with	Part no. Article no.	Notes	
	-	IZM99... IN99...	IZMC2-LT YC-500136	Handle un-foldable

New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

Trip Signal Switch

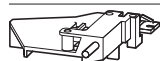
Trip signal switch (OTS)
2CO switches



	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Notes
–	IZM99...	IZMC2-OTS YC-500038	–
–	IZM99...	+IZMC2-OTS YC-300038	–

Non-Interlocked Trip Indicators

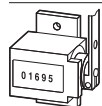
Contains mechanical trip indicator (red pin)
After tripping, no interlocking mechanism is available to avoid switching to circuit breaker
Can be used in combination with OTS.



	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device	Notes
–	IZM99...	IZMC2-RA YC-500043	Instead of standard delivery.
–	IZM99...	+IZMC2-RA YC-300043	

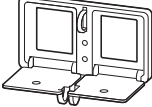

Operation Counters

To record the number of ON-OFF operations. It can operate without a motor operator.



	For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device
–	IZM99 IN99...	IZMC2-OC YC-500039
–	IZM99 IN99...	+IZMC2-OC YC-300039

Interlocking Devices

		For use with	Part no. Article no. Suffix + for ordering with circuit breaker basic device
Button cover (with optional padlock) Sealed button cover 	Plastic cover, ON and OFF position button lock	IZM99... IN99...	IZMC2-PLPC-P YC-500044
	Plastic cover, ON and OFF position button lock	IZM99... IN99...	+IZMC2-PLPC-P YC-300044
	Metal cover, ON and OFF position button lock	IZM99... IN99...	IZMC2-PLPC-M YC-500045
	Metal cover, ON and OFF position button lock	IZM99... IN99...	+IZMC2-PLPC-M YC-300045
OFF position safety lock The cylinder lock of each part are not interchangeable 	Kirk installation kit with lock cylinder and key, A type	IZM99... IN99...	IZMC2-1L1K YC-500125
	Kirk installation kit with lock cylinder and key, B type	IZM99... IN99...	IZMC2-1L1K-B YC-500126
	Kirk installation kit with lock cylinder and key, C type	IZM99... IN99...	IZMC2-1L1K-C YC-500127
	Kirk installation kit with lock cylinder and key, D type	IZM99... IN99...	IZMC2-1L1K-D YC-500128
	Kirk installation kit with lock cylinder and key, E type	IZM99... IN99...	IZMC2-1L1K-E YC-500129
	Kirk installation kit with lock cylinder and key, F type	IZM99... IN99...	IZMC2-1L1K-F YC-500130
Notes: Factory mounting to be recommended (free mounting), with indication in the order about which type of basic device to be mounted on. Additional charge is required for onsite mounting by Eaton. For more details, please consult with Eaton sales representatives prior to ordering.			
3 key locks and 2 keys The cylinder lock and key of -B and -C are not interchangeable with IZM-3L2K	3 identical key locks, including 3 complete sets of lock frames, lock cylinders and keys		
		IZM99... IN99...	IZMC2-3L2K YC-500131
		IZM99... IN99...	IZMC2-3L2K-B YC-500132
	IZM99... IN99...	IZMC2-3L2K-C YC-500133	
Notes: Factory mounting to be recommended (free mounting), with indication in the order about which type of basic device to be mounted on. Additional charge is required for onsite mounting by Eaton. For more details, please consult with Eaton sales representatives prior to ordering.			

New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

IZM99 Interlocking Devices

		For use with	Part no. Article no.
Type 2 requires 2 interlock mounting kits and 1 set of cables	Mechanical interlocking of fixed circuit breaker		
Type 31 requires 3 interlock mounting kits and 2 sets of cables	2 circuit breakers interlocking: 1 for normal power supply (A), 1 for emergency supply (B). It requires additional ropes.	IZM99...F IN99...F	IZMC2-MIL2C-F YC-500139
Type 32 or 33 requires 3 interlock mounting kits and 3 sets of cables	31 type, 3 circuit breakers interlocking: 2 for normal power supply (A & C), 1 for emergency supply (B). If B breaks, circuit breaker A&C can still turn off. B can turn off only when A&C breaks. It requires 2 set of ropes.	IZM99...F IN99...F	IZMC2-MIL31C-F YC-500140
	32 type, circuit breakers interlocking: 2 for normal power supply (A & C), 1 for emergency supply (B). If B breaks, circuit breaker A&C can still turn off. Among the 3 circuit breakers, 1 or 2 breakers can turn off simultaneously. It requires 3 set of ropes.	IZM99...F IN99...F	IZMC2-MIL32C-F YC-500141
	33 type, circuit breakers interlocking: 3 for normal power supply (A&B & C), or in the case of emergency supply, only 1 circuit breaker can turn off. It requires 3 set of ropes.	IZM99...F IN99...F	IZMC2-MIL33C-F YC-500142
Type 2 requires 2 interlock mounting kits and 1 set of cables	Mechanical interlocking of withdrawable circuit breaker		
Type 31 requires 3 interlock mounting kits and 2 sets of cables	2 circuit breakers interlocking: 1 for normal power supply (A), 1 for emergency supply (B). It requires additional ropes.	IZM99...W IN99...W	IZMC2-MIL2C-W YC-500143
Type 32 or 33 requires 3 interlock mounting kits and 3 sets of cables	31 type, 3 circuit breakers interlocking: 2 for normal power supply (A & C), 1 for emergency supply (B). If B breaks, circuit breaker A&C can still turn off. B can turn off only when A&C breaks. It requires 2 set of ropes.	IZM99...W IN99...W	IZMC2-MIL31C-W YC-500144
	32 type, circuit breakers interlocking: 2 for normal power supply (A & C), 1 for emergency supply (B). If B breaks, circuit breaker A&C can still turn off. Among the 3 circuit breakers, 1 or 2 breakers can turn off simultaneously. It requires 3 set of ropes.	IZM99...W IN99...W	IZMC2-MIL32C-W YC-500145
	33 type, circuit breakers interlocking: 3 for normal power supply (A&B & C), or in the case of emergency supply, only 1 circuit breaker can turn off. It requires 3 set of ropes.	IZM99...W IN99...W	IZMC2-MIL33C-W YC-500146
	Cable kits for mechanical interlock		
	Depending on the type of interlock, a particular number of cable connectors is required. With the flexible cable connectors, various different switch arrangements can be implemented.		
	One set contains two cables.		
	1520 mm long	IZM99... IN99...	IZMC2-MIL-CAB1520 YC-500147
	1830 mm long	IZM99... IN99...	IZMC2-MIL-CAB1830 YC-500148
	2440 mm long	IZM99... IN99...	IZMC2-MIL-CAB2440 YC-500149
	3050 mm long	IZM99... IN99...	IZMC2-MIL-CAB3050 YC-500150

2-line interlocking logic

A	B
0	0
1	0
0	1

31 type interlocking logic

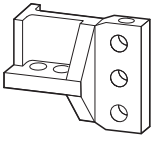
A	B	C
0	0	0
1	0	0
1	0	1
0	0	1
0	1	0

32 type interlocking logic

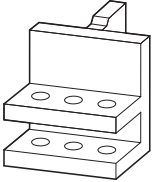
A	B	C
0	0	0
1	0	0
0	1	0
0	0	1
1	1	0
0	1	1
1	0	1

33 type interlocking logic

A	B	C
0	0	0
1	0	0
0	1	0
0	0	1



2000A, 4000A (For double wide)



2500-3200A, 5000-6300A

Standard frame
6 pcs for 3P, 8 pcs for 4P

For double wide
12 pcs for 3P, 16 pcs for 4P

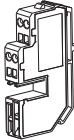
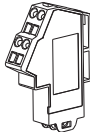
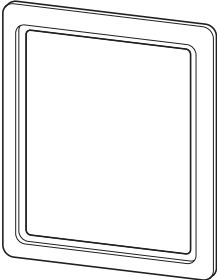
Main terminal component adapter

Connection	Rated Current I_n A	Rated ultimate switching capacity I_{cu} KA	Pole	For use with	Part no. Article no.
Vertical connection by fixed or withdrawable circuit breaker					
Vertical Wiring Supplied as Standard on Vertical Main Wiring Terminal					
Connection vertical	4000	100	3	IZM99... IN99...	IZMC2-TV633H-4000 YC-500115
Connection vertical	5000-6300	100	3	IZM99... IN99...	IZMC2-TV633H-6300 YC-500116
Connection vertical	4000	100	4	IZM99... IN99...	IZMC2-TV634H-4000 YC-500117
Connection vertical	5000-6300	100	4	IZM99... IN99...	IZMC2-TV634H-6300 YC-500118

New Generation Air Circuit Breaker IZM99

Circuit Breaker Accessories

Other Accessories

		Rated control voltage U_s V	For use with	Part no. Article no.
Control circuit wiring terminal for withdrawable circuit breakers				
The number of secondary terminals to be purchased separately depends on the type of accessories to be mounted separately. For the exact number, please refer to wiring diagrams.				
	Secondary terminal, 8	–	IZM99 IN99...	IZMC2-SEC-TB8-W-2 YC-500103
	Secondary terminal, 20	–	IZM99 IN99...	IZMC2-SEC-TB20-W-2 YC-500104
	Secondary terminal, 30	–	IZM99 IN99...	IZMC2-SEC-TB30-W-2 YC-500105
Control circuit wiring terminal for fixed circuit breakers				
The number of secondary terminals to be purchased separately depends on the type of accessories to be mounted separately. For the exact number, please refer to wiring diagrams.				
	Secondary terminal, 8	–	IZM99 IN99...	IZMC2-SEC-TB8-F-2 YC-500106
	Secondary terminal, 20	–	IZM99 IN99...	IZMC2-SEC-TB20-F-2 YC-500107
	Secondary terminal, 30	–	IZM99 IN99...	IZMC2-SEC-TB30-F-2 YC-500108
IP31 door escutcheon				
Door escutcheon is supplied as standard with circuit breaker basic device / cassette.				
		–	IZM99 IN99...	IZMC2-DEG YC-500137

Technical Data

		IZMC2-PCAM-2	IZMC2-MCAM-2	IZMC2-ECAM-2
General				
Size (W × H × D)	mm	24 x 105 x 80	24 x 105 x 80	24 x 105 x 80
Mounting		35mm DIN rail (top hat rail)	35mm DIN rail (top hat rail)	35mm DIN rail (top hat rail)
Protection type		IP20	IP20	IP20
Power supply	V DC	24 V DC	24 V DC	24 V DC
LED indicator		Status	Status	Status
		SF	Transmit	
		BF	Receive	
Network				
Ethernet		–	–	RJ45 socket
PROFIBUS		SUB-D type 9 pole socket	–	–
Modbus		–	Plug type wiring terminal	–
Function		Submodule	Sub module	TCP/IP user
Interface		RS485	RS485	Ethernet
Protocol		PROFIBUS DP	Modbus-RTU	Modbus TCP, http(s), SMTP
Baut rate		Automatic search up to 12 MBit/s	1200/4800/9600/19200 baut/S, adjustable via trip units	100MBit/s self-adjustable
Bus end resistance		Plug into socket based on requirements	121 Ω , switch on/off externally	
Bus address		1 - 127, adjustable via trip units	1 - 127, adjustable via trip units	IP, adjustable via trip units
Maximum distance		2.4 km	1.2 km	100 m
Supported functions		Periodic data transmission	Periodical data transmission 03=read register 04=read word variable 08=connection test 16=write register	Web server

New Generation Air Circuit Breaker IZM99

Technical Data

Accessories of IZM99

		Standard auxiliary contact IZMC2-AS...	Trip signal auxiliary contact IZMC2-OTS	Circuit breaker withdrawer position indication contact IZMC2-CS...
Rated switching capacity				
Inductive load				
250 V AC	A	10	10	10
125 V DC	A	0.5	0.5	0.5
250 V DC	A	0.25	0.25	0.25

Accessories of IZM99

			Shunt release IZMC2-ST24DC IZMC2-ST24DC	IZMC2-ST48DC IZMC2-ST48DC	IZMC2-ST110AD IZMC2-ST110AD	IZMC2-ST230AD IZMC2-ST230AD
Rated control voltage						
AC 50/60 Hz	U _s	V	-	-	110-127	208-240
DC	U _s	V	24	48	110-125	220-250
Power consumption						
AC		VA	-	-	(pick-up 450)	(pick-up 450)
DC		W	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)
Response time of circuit breaker		ms	35	35	35	35
Operating range						
Drop-out voltage		× U _c	-			
Pick-up voltage		× U _c	According to IEC standards			

Accessories of IZM99

			Closing release IZMC2-SR24DC	IZMC2-SR48DC	IZMC2-SR110AD	IZMC2-SR230AD
Rated control voltage						
AC 50/60 Hz	U _s	V	-	-	110-127	208-240
DC	U _s	V	24	48	110-125	220-250
Power consumption						
AC		VA	-	-	(pick-up 450)	(pick-up 450)
DC		W	(pick-up 250)	(pick-up 250)	(pick-up 450)	(pick-up 450)
Response time of circuit breaker		ms	40	40	40	40
Operating range						
Drop-out voltage		× U _c	-			
Pick-up voltage		× U _c	According to IEC standards			

Accessories of IZM99

			Undervoltage release			
			IZMC2-UVR24DC	IZMC2-UVR48DC	IZMC2-UVR110AC	IZMC2-UVR110DC
Rated control voltage						
AC 50/60 Hz	U_s	V	-	-	110-127	-
DC	U_s	V	24	48	-	110-125
Power consumption						
AC		VA	-	-	10 (pick-up 450)	-
DC		W	18 (pick-up 250)	18 (pick-up 250)	-	10 (pick-up 450)
Response time of circuit breaker		ms	70	70	70	70
Operating range						
Drop-out voltage		$\times U_c$	According to IEC standards			
Pick-up voltage		$\times U_c$	According to IEC standards			

Accessories of IZM99

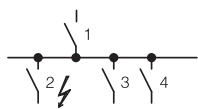
			Undervoltage release			
			IZMC2-UVR220DC	IZMC2-UVR230AC	IZMC2-UVR400AC	
Rated control voltage						
AC 50/60 Hz	U_s	V	-	208-240	380-415	
DC	U_s	V	220-250	-	-	
Power consumption						
AC		VA	-	10 (pick-up 400)	10 (pick-up 400)	
DC		W	10 (pick-up 250)	-	-	
Response time of circuit breaker		ms	70	70	70	
Operating range						
Drop-out voltage		$\times U_c$	According to IEC standards			
Pick-up voltage		$\times U_c$	According to IEC standards			

Accessories of IZM99

			Motor operator					
			IZMC2-M24DC	IZMC2-M48DC	IZMC2-M110DC	IZMC2-M220DC	IZMC2-M110AC	IZMC2-M230AC
Rated control voltage								
AC 50/60 Hz	U_s	V	-	-	-	-	110-127	208-240
DC	U_s	V	24	48	110-125	220-250	-	-
Energy storing time		s	5	5	5	5	5	5
Rated current		I_n	A	12	5	2	1	2
Starting current		A	3	5	6	6	6	6
Power consumption								
AC 50/60 Hz		VA	300	250	250	250	250	250
DC		W	300	250	250	250	250	250

New Generation Air Circuit Breaker IZM99

Selectivity



- I_n Rated operational current
- I_u Rated uninterrupted current
- I_{cu} Rated short-circuit breaking capacity
- I_i Set value non-delayed short-circuit releases

Selectivity 415 V AC

Between circuit-breakers enables the separate disconnection of faulty system sections. Selectivity exists between incoming circuitbreaker 1 and outgoing circuit-breaker 2 if, only outgoing breaker 2 trips at position 2 during a short-circuit. System sections 3 and 4 remain operational.

Selection:

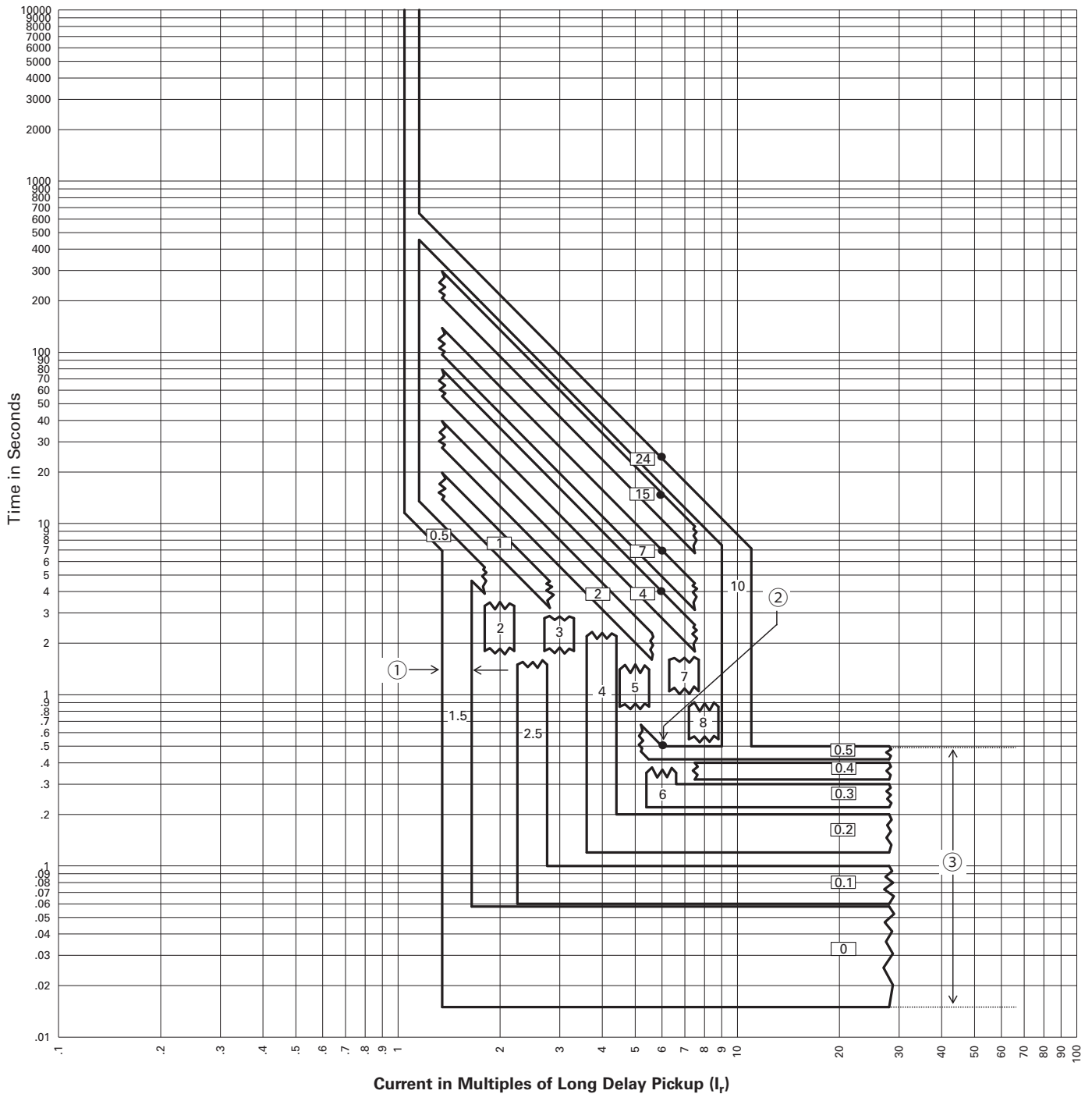
Provided that the short-circuit current does not exceed those values specified ($I_{cc\ rms}$). These details represent the limits of selectivity. Both circuit-breakers will switch off with higher short-circuit currents. On IZM circuit-breakers with V, U releases, the delay time t_{sd} must be at least 100 ms longer than the delay time of the next downstream levels (2, 3, 4).

Incoming circuit breaker (1)		IZM99...-V						IZM99...-U					
	I_n [A]	4000	4000	5000	5000	6300	6300	4000	4000	5000	5000	6300	6300
	I_{cu} [KA]	85	100	85	100	85	100	85	100	85	100	85	100
	I_i [A]	48000	48000	60000	60000	63000	63000	48000	48000	60000	60000	63000	63000
Outgoing circuit breaker (2)													
	I_u [A]												
	$I_{cu2(415V)}$ [KA]	N	H	N	H	N	H	N	H	N	H	N	H
Prospective short circuit current ($I_{cc\ rms}$ in kA)													
NZMB(C)(N) (H)1-A(M)...	20	25-100	T	T	T	T	T	T	T	T	T	T	T
	25	25-100	T	T	T	T	T	T	T	T	T	T	T
	32	25-100	T	T	T	T	T	T	T	T	T	T	T
	40	25-100	T	T	T	T	T	T	T	T	T	T	T
	50	25-100	T	T	T	T	T	T	T	T	T	T	T
	63	25-100	T	T	T	T	T	T	T	T	T	T	T
	80	25-100	T	T	T	T	T	T	T	T	T	T	T
	100	25-100	T	T	T	T	T	T	T	T	T	T	T
	125	25-100	T	T	T	T	T	T	T	T	T	T	T
NZMB(C)(N) (H)2-A(M) (V)...	160	25-100	T	T	T	T	T	T	T	T	T	T	T
	20	25-150	T	T	T	T	T	T	T	T	T	T	T
	25	25-150	T	T	T	T	T	T	T	T	T	T	T
	32	25-150	T	T	T	T	T	T	T	T	T	T	T
	40	25-150	T	T	T	T	T	T	T	T	T	T	T
	50	25-150	T	T	T	T	T	T	T	T	T	T	T
	63	25-150	T	T	T	T	T	T	T	T	T	T	T
	80	25-150	T	T	T	T	T	T	T	T	T	T	T
	90	25-150	T	T	T	T	T	T	T	T	T	T	T
	100	25-150	T	T	T	T	T	T	T	T	T	T	T
	125	25-150	T	T	T	T	T	T	T	T	T	T	T
	140	25-150	T	T	T	T	T	T	T	T	T	T	T
	160	25-150	T	T	T	T	T	T	T	T	T	T	T
	200	25-150	T	T	T	T	T	T	T	T	T	T	T
	220	25-150	T	T	T	T	T	T	T	T	T	T	T
	250	25-150	T	T	T	T	T	T	T	T	T	T	T
300	25-150	T	T	T	T	T	T	T	T	T	T	T	
NZMC(N)(H) 3-A(M)(V)...	220	36-150	T	T	T	T	T	T	T	T	T	T	T
	250	36-150	T	T	T	T	T	T	T	T	T	T	T
	320	36-150	T	T	T	T	T	T	T	T	T	T	T
	350	36-150	T	T	T	T	T	T	T	T	T	T	T
	400	36-150	T	T	T	T	T	T	T	T	T	T	T
	450	36-150	T	T	T	T	T	T	T	T	T	T	T
	500	36-150	T	T	T	T	T	T	T	T	T	T	T
	630	36-150	T	T	T	T	T	T	T	T	T	T	T
	NZMN(H) 4-A(M)(V)...	550	50-100	T	T	T	T	T	T	T	T	T	T
630		50-100	T	T	T	T	T	T	T	T	T	T	T
800		50-100	T	T	T	T	T	T	T	T	T	T	T
875		50-100	T	T	T	T	T	T	T	T	T	T	T
1000		50-100	T	T	T	T	T	T	T	T	T	T	T
1250		50-100	T	T	T	T	T	T	T	T	T	T	T
1400		50-100	T	T	T	T	T	T	T	T	T	T	T
1600		50-100	T	T	T	T	T	T	T	T	T	T	T

Notes B = Basic switching capacity, N = Normal switching capacity, H = High switching capacity, T = Total selectivity

IZM99...V(U)...PXR20/25 Long Delay(L) and Short Delay(S) Curves

L-Protection: I²t-Characteristic curve and S-Protection: Flat characteristic curve



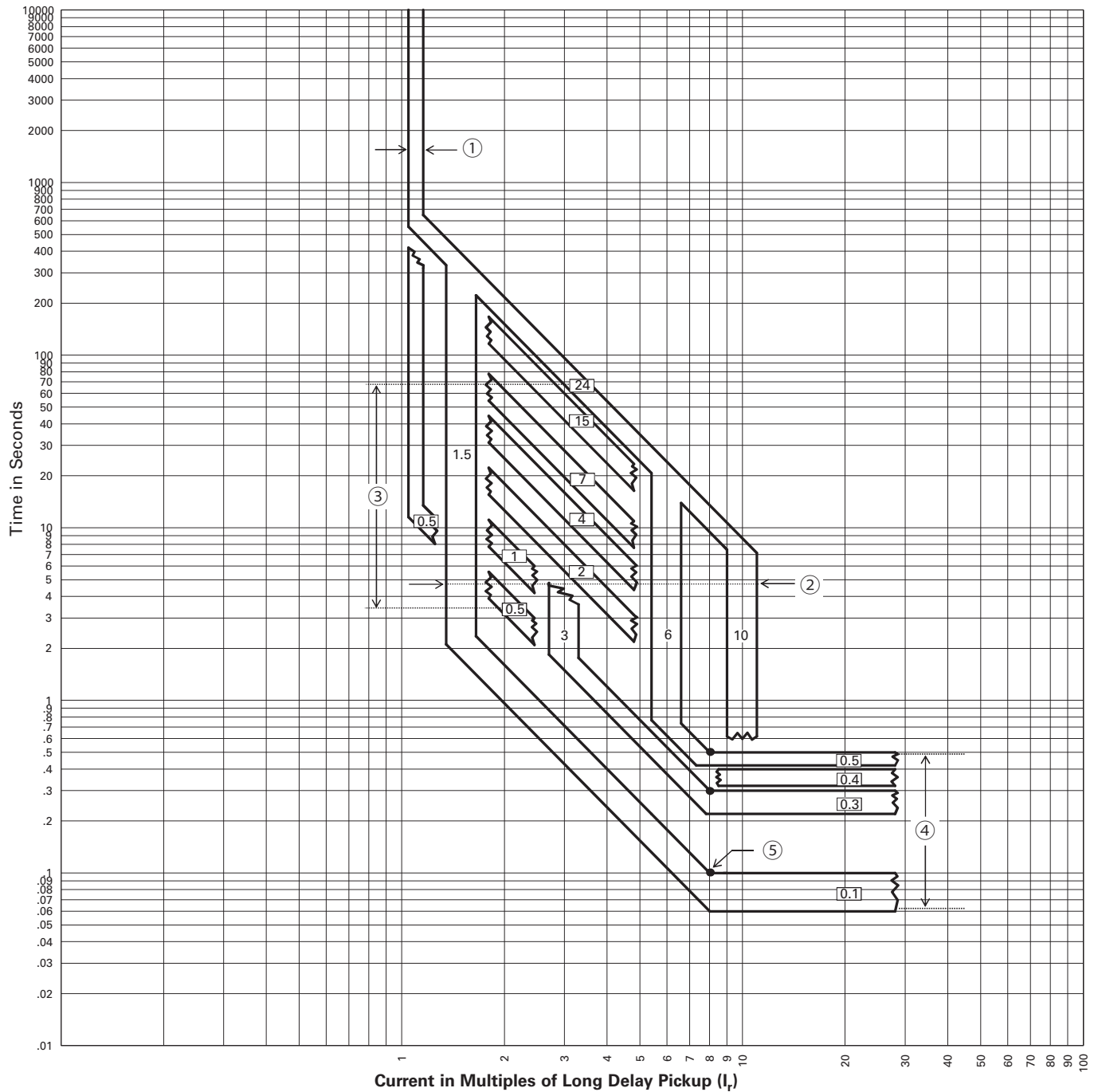
Notes:

1. Short slope: Flat, the actual pickup point has 100% ± 10% tolerance.
2. Long delay I²T slopes flattens out at 6x of I_r.
3. Short time delay from 0(50ms) to 0.5s, with +0 / -80ms tolerance except 0.1s and 0s setting
0.1s setting, trip time is 0.06s to 0.1s
0s setting, nominal clear time is 60ms with auxiliary power and 120ms without.
4. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
5. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
6. This curve is for 50Hz, 60Hz applications.
7. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current

New Generation Air Circuit Breaker IZM99

Tripping Curves

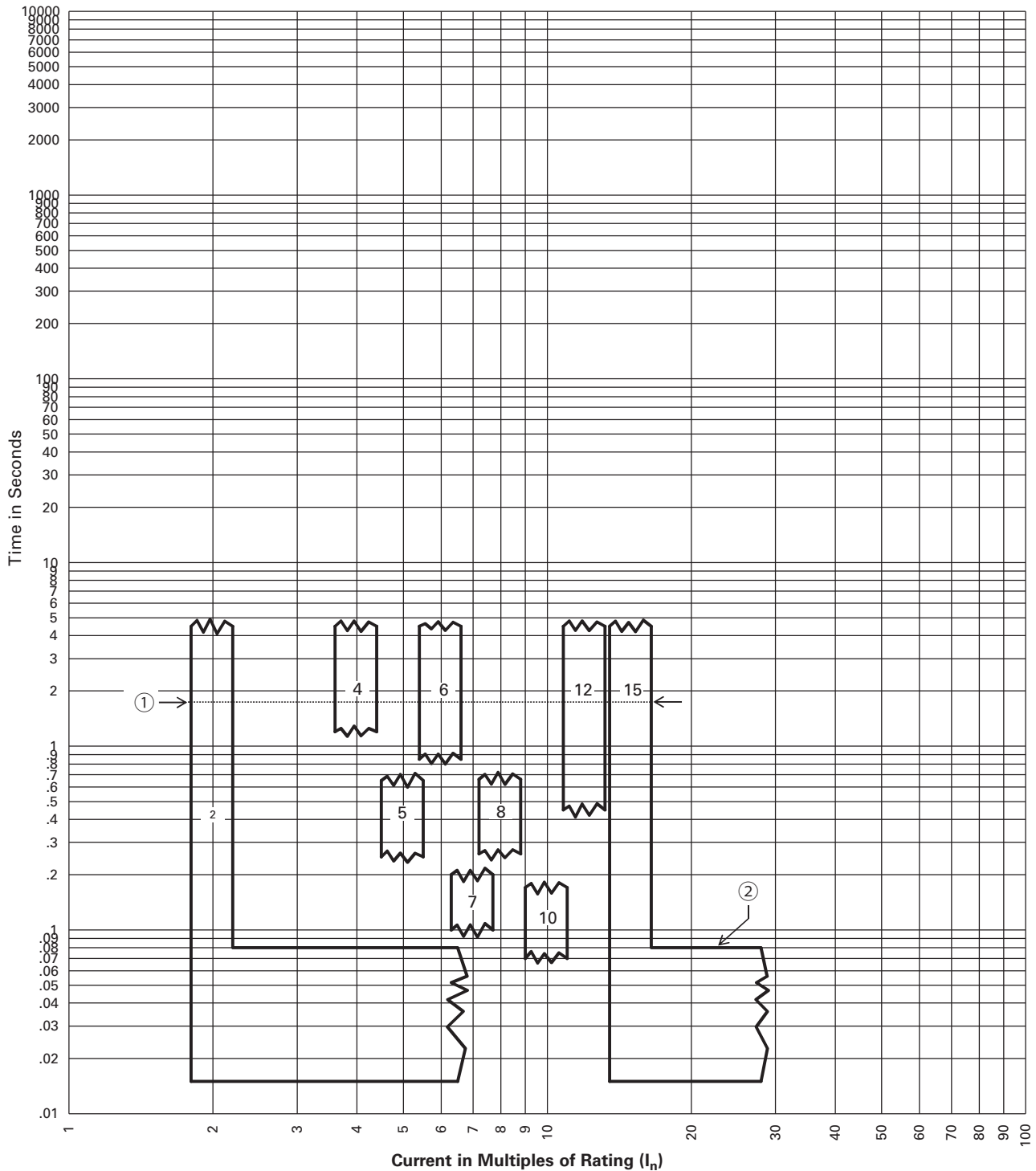
IZM99...V(U)...PXR20/25 Long Delay(L) and Short Delay(S) Curves S-Protection with: I^2t -Characteristic curve ON



Notes:

1. This curve shown as a multiple of the LONG PU setting(I_l). The actual pickup point occurs at 110% of the I_l , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_l , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I^2T . The short pickup points have $\pm 10\%$ tolerance.
time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s.
tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I^2T slopes flattens out at 8x of I_l for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I^2T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.

IZM99...V(U)...PXR20/25 Instantaneous(I) Curves I-Protection: Adjustable



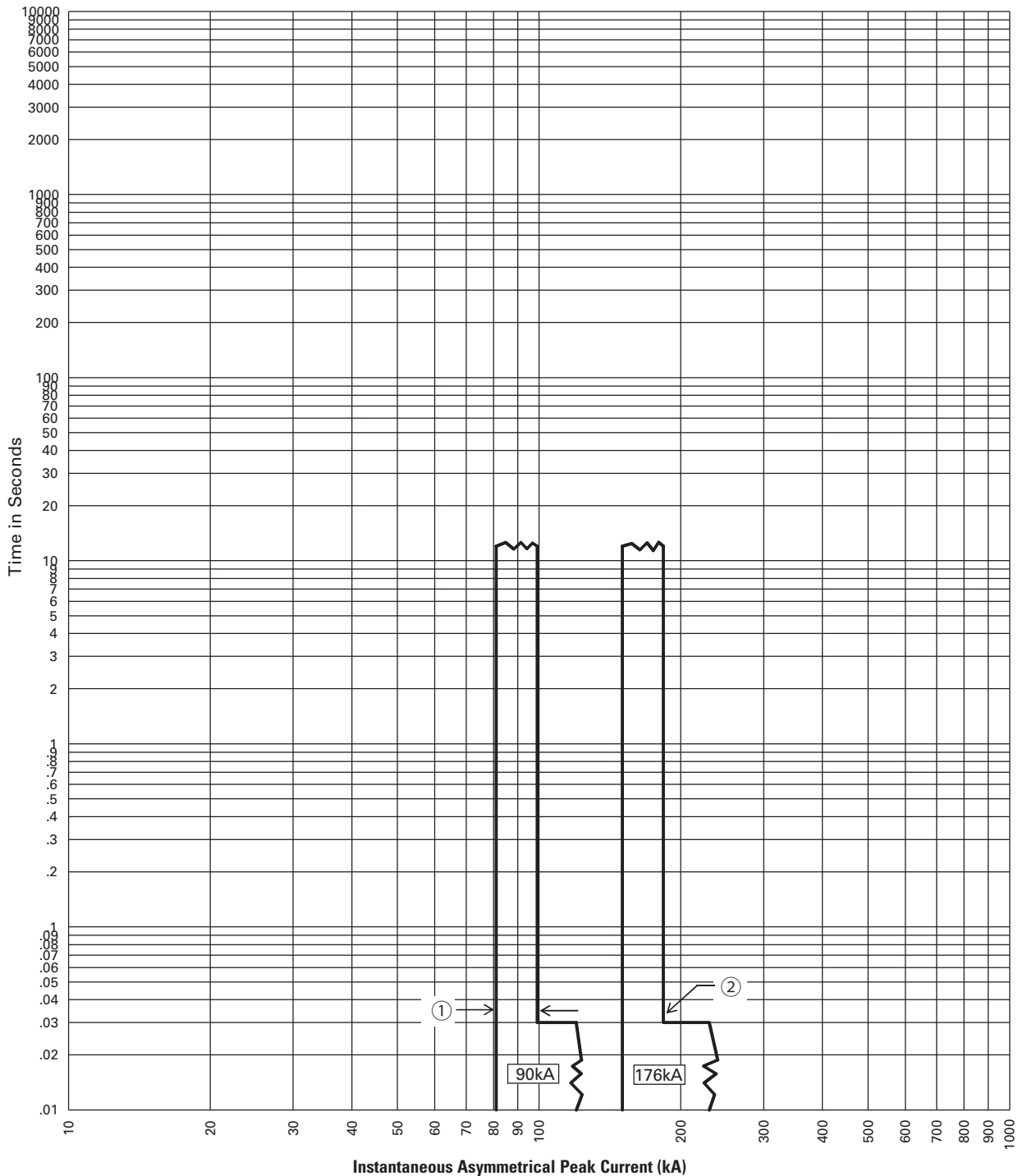
Notes:

1. The Instantaneous settings have conventional 100% ± 10% as the pickup points.
2. The nominal Instantaneous trip time is 60ms with auxiliary power supply and 100ms without.
3. Instantaneous protection could be disabled by setting Instantaneous PU switch to OFF position.
4. The curve is shown as a multiple of the Current Rating (I_n).
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

New Generation Air Circuit Breaker IZM99

Tripping Curves

IZM99...V(U)...PXR20/25 Instantaneous(I) Curves Instantaneous Trip at High Fault Currents

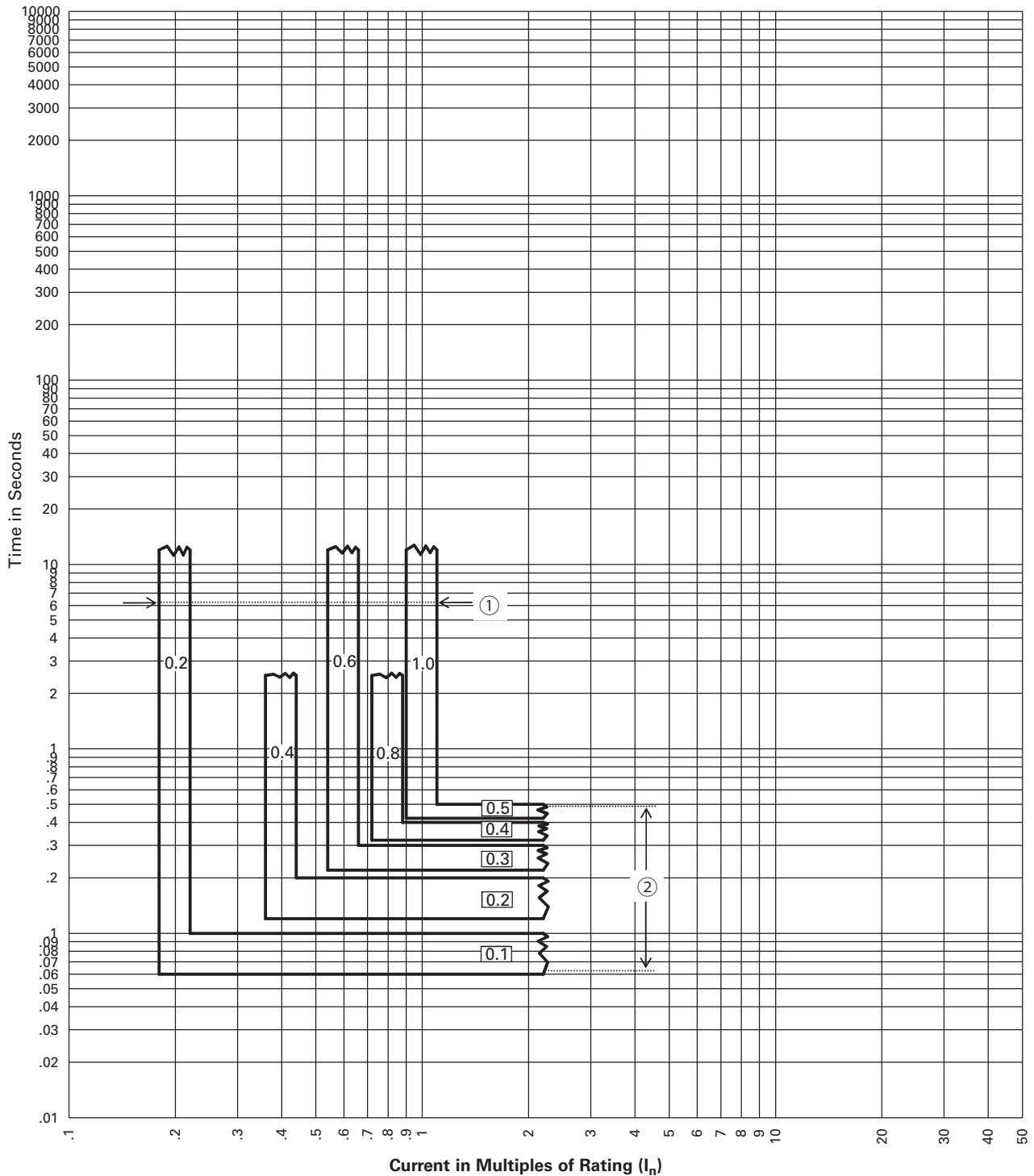


Notes:

1. The peak current level setting for IZM99 is fixed at 176kA.
2. This protection is functional even when the Instantaneous is set to the OFF position.
3. The PXR will light the Instantaneous LED for a High Instantaneous trip.
4. The total Instantaneous clearing times shown are conservative and consider the maximum response times of the trip unit, the circuit breaker opening, and the interruption of the current under factors that contribute to worst case conditions, like: maximum rated voltages, single phase interruption, and minimum power factor. Faster clearing times are possible depending on the specific system conditions, the type of circuit breaker applied, and if any arc reduction settings are employed.

IZM99...V(U)...PXR20/25 Ground(G) Curves

G: Ground fault protection - Flat characteristic curve



Notes:

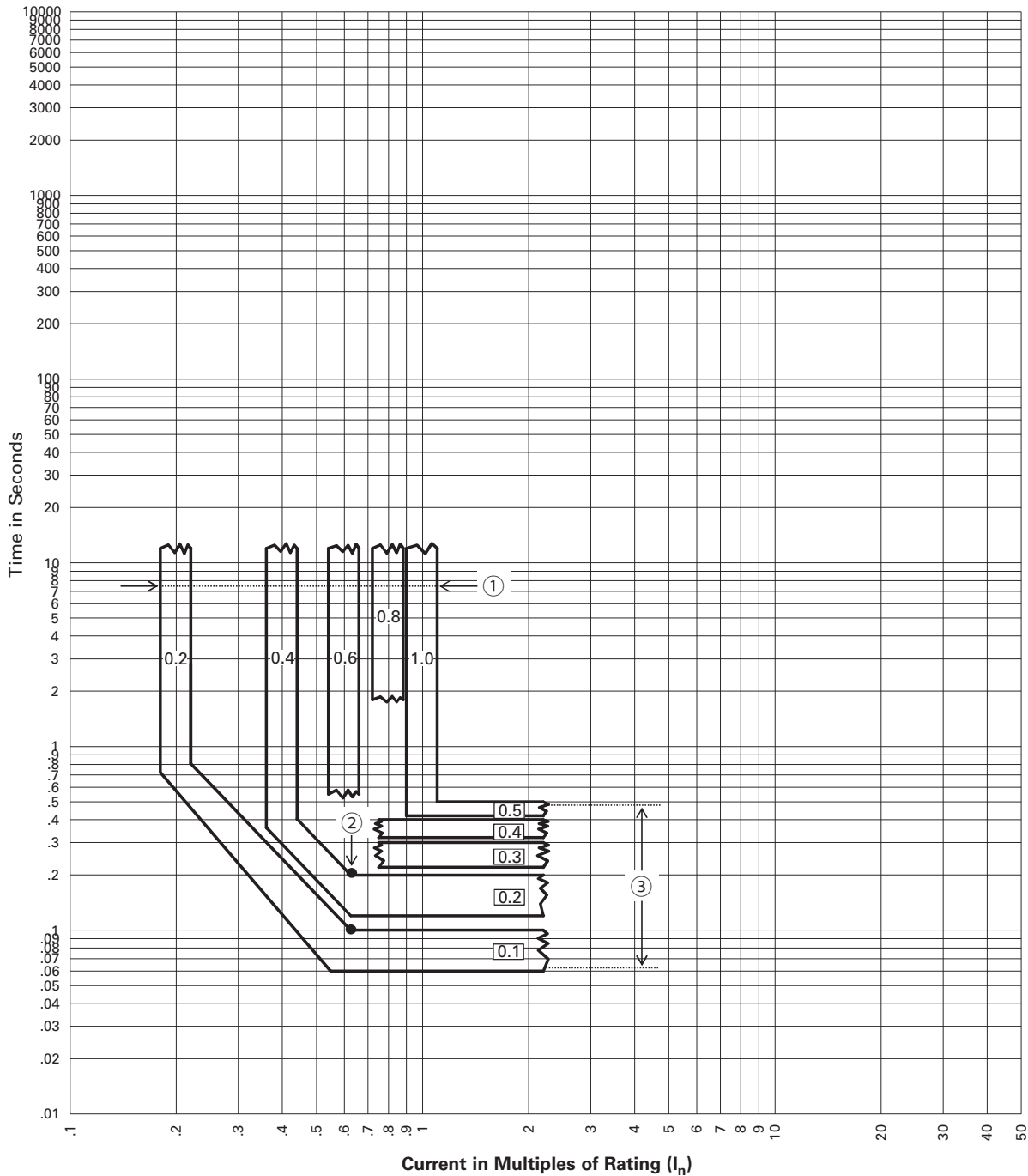
1. Ground PU setting from 0.2 to 1.0 of I_n with steps of 0.2, have tolerance of $100\% \pm 10\%$.
2. Ground Flat time from 0.1s to 0.5s, with 0.1s increments.
3. Ground slope: Flat, trip time tolerance is $+0 / -80\text{ms}$ for all settings except 0.1s setting is 0.06s to 0.1s.
4. The curve is shown as a multiple of the Current Rating (I_n).
5. The end of the curve is determined by the interrupting rating of the circuit breaker.
6. Curves applies from -20°C to $+50^\circ\text{C}$ ambient. Temperatures above $+85^\circ\text{C}$ will cause over temperature trip.
7. This curve is for 50Hz, 60Hz applications.
8. These curves are comprehensive for series IZM99 breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

New Generation Air Circuit Breaker IZM99

Tripping Curves

IZM99...V(U)...PXR20/25 Ground(G) Curves

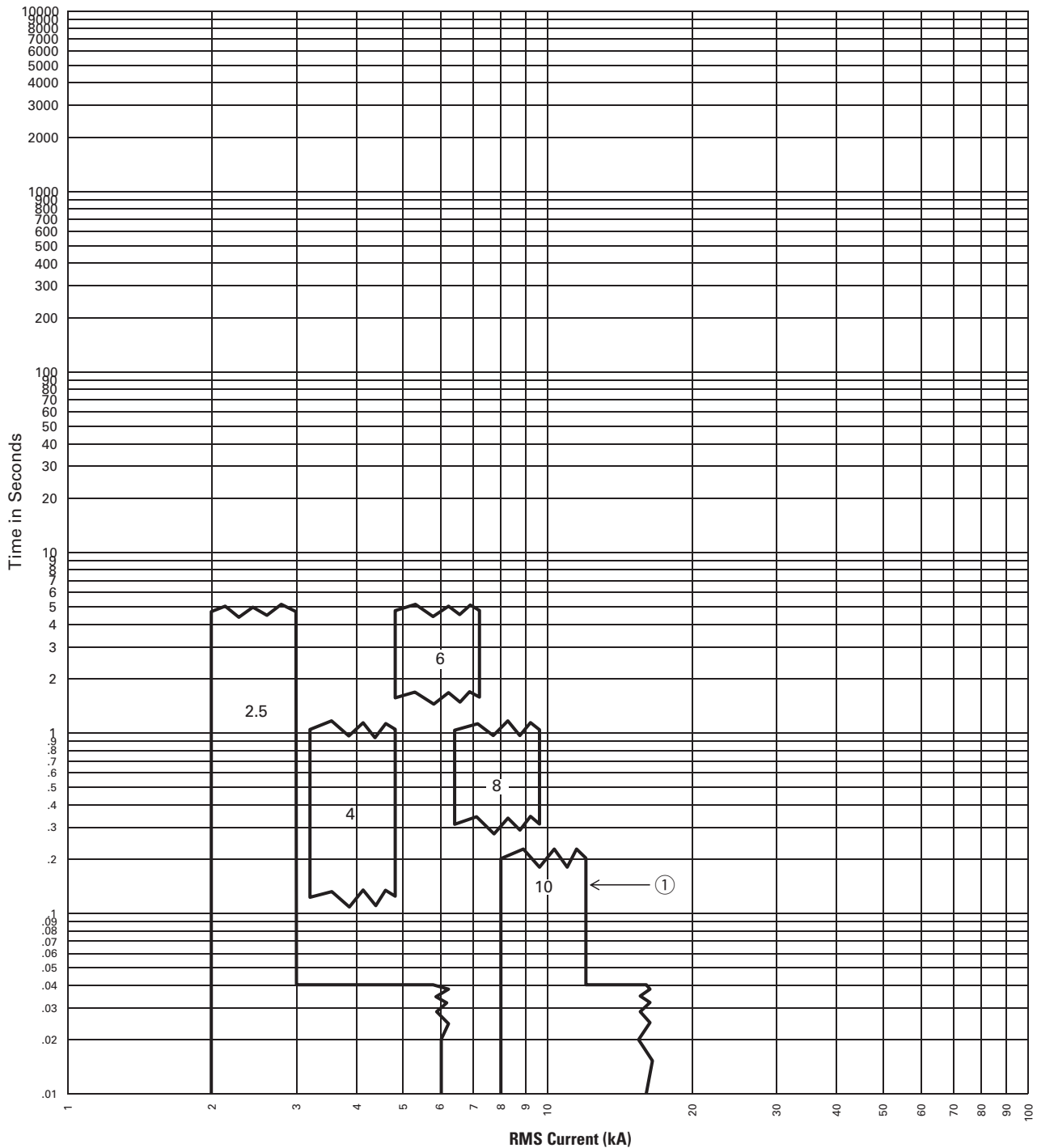
G: Ground fault protection-I²t-Characteristic curve ON



Notes:

1. Ground PU setting from 0.2 to 1.0 of I_n with steps of 0.2, have tolerance of $100\% \pm 10\%$.
2. Beak points at $0.625 \times I_n$ to flat.
3. Ground I²T time from 0.1s to 0.5s, with 0.1s increments.
4. Ground slope: Flat, trip time tolerance is $+0 / -80\text{ms}$ for all settings except 0.1s setting is 0.06s to 0.1s.
Ground slope: I²T, tolerance is
0.1s, 0.2s : $+0 / -40\%$
0.3s, 0.4s, 0.5s : $+0 / -30\%$
5. The curve is shown as a multiple of the Current Rating (I_n).
6. The end of the curve is determined by the interrupting rating of the circuit breaker.
7. Curves applies from -20°C to $+50^\circ\text{C}$ ambient. Temperatures above $+85^\circ\text{C}$ will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZM99...V(U)...PXR20/25 Maintenance Mode Curve Arc-flash Reduction Maintenance Mode for IZM99



Notes:

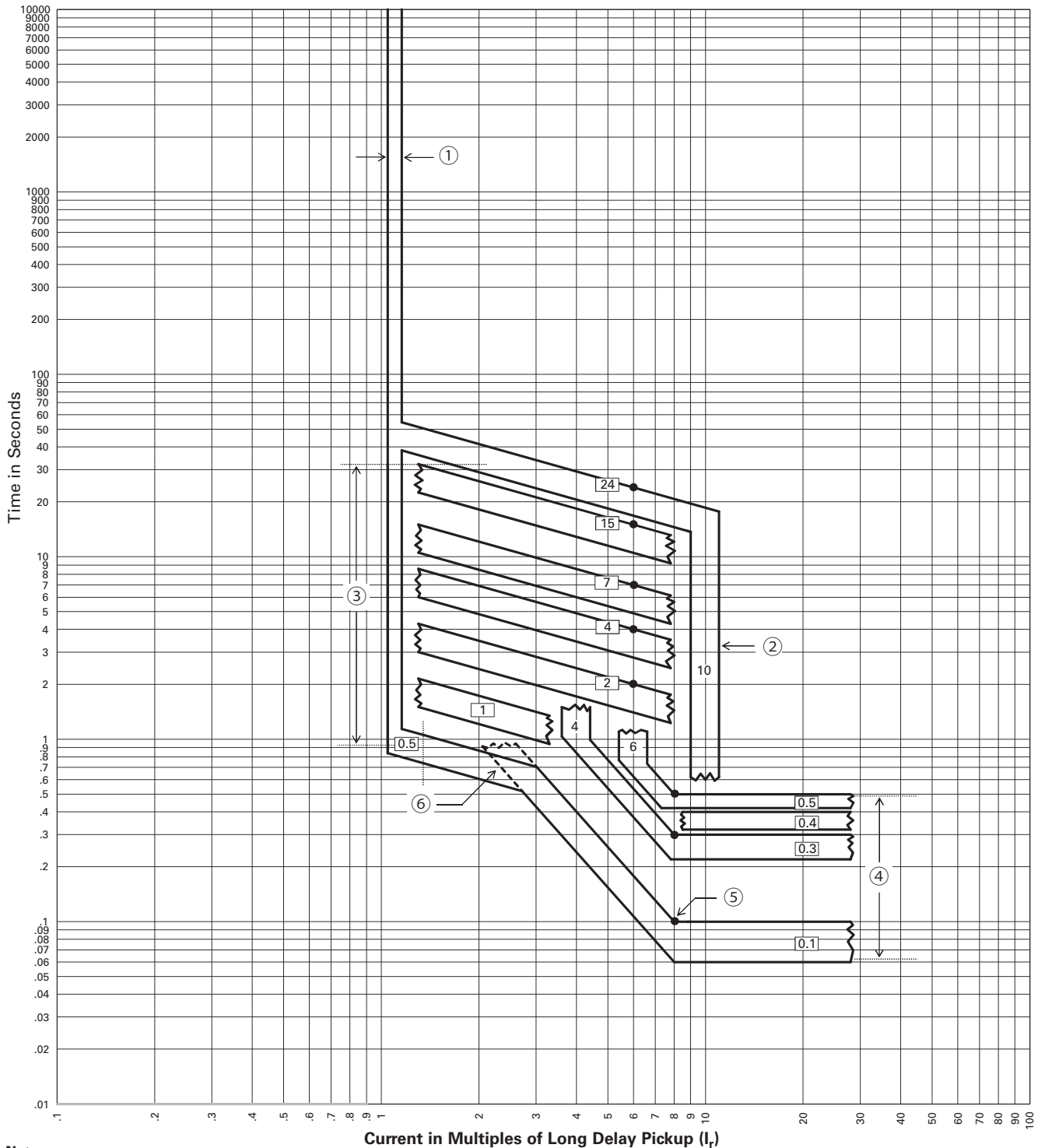
- Nominal reduction values have a tolerance of $\pm 20\%$.
- The nominal ARMs trip time is 40ms with auxiliary power supply.
- The Maintenance Mode feature must be ENABLED via setting Maintenance Mode switch to ON position remote switch, or communications for these curves to apply.
Maintenance Mode is in use being shown by blue LED.
- The PXR will light the Instantaneous LED for a Maintenance Mode Trip.
- The end of the curve is determined by the interrupting rating of the circuit breaker.
- Curves applies from -20°C to $+50^{\circ}\text{C}$ ambient. Temperatures above $+85^{\circ}\text{C}$ will cause over temperature trip.
- This curve is for 50Hz, 60Hz applications.
- These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

New Generation Air Circuit Breaker IZM99

Tripping Curves

IZM99...V(U)...PXR20/25 Long Delay(L) Curves

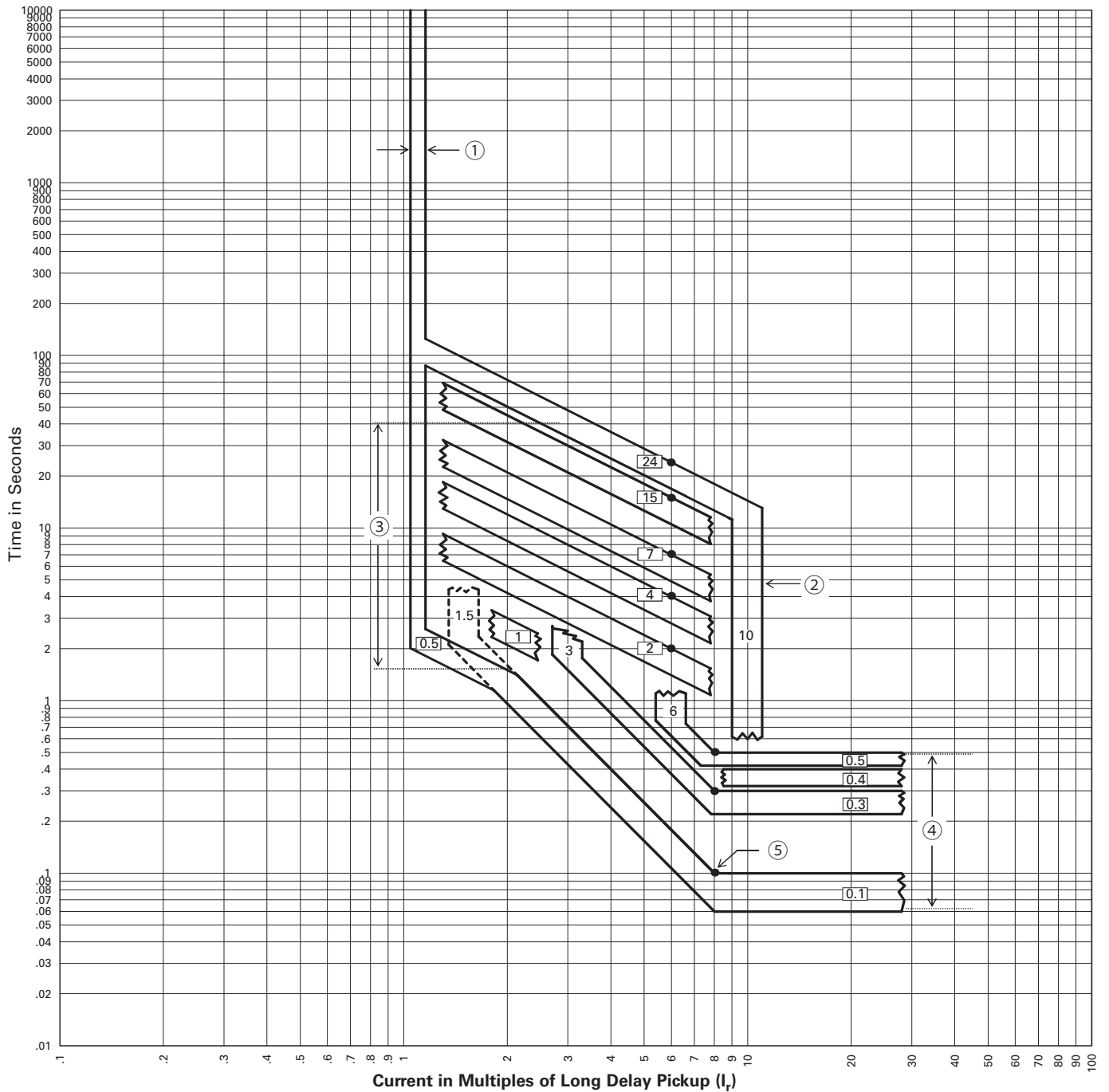
L-Protection: $I^{0.5}t$ -Characteristic curve



Notes:

1. This curve shown as a multiple of the LONG PU setting (I_r). The actual pickup point occurs at 110% of the I_r , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_r , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I^2T . The short pickup points have $\pm 10\%$ tolerance. time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s. tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I^2T slopes flattens out at 8x of I_r , for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I^2T line will determine the other break point and shape of the curve.
6. If the short delay time is longer than long delay time, the short delay trip time will follow the long time setting.
7. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
8. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
9. This curve is for 50Hz, 60Hz applications.
10. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.
The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

IZM99...V(U)...PXR20/25 Long Delay(L) Curves L-Protection: I²t-Characteristic curve



Notes:

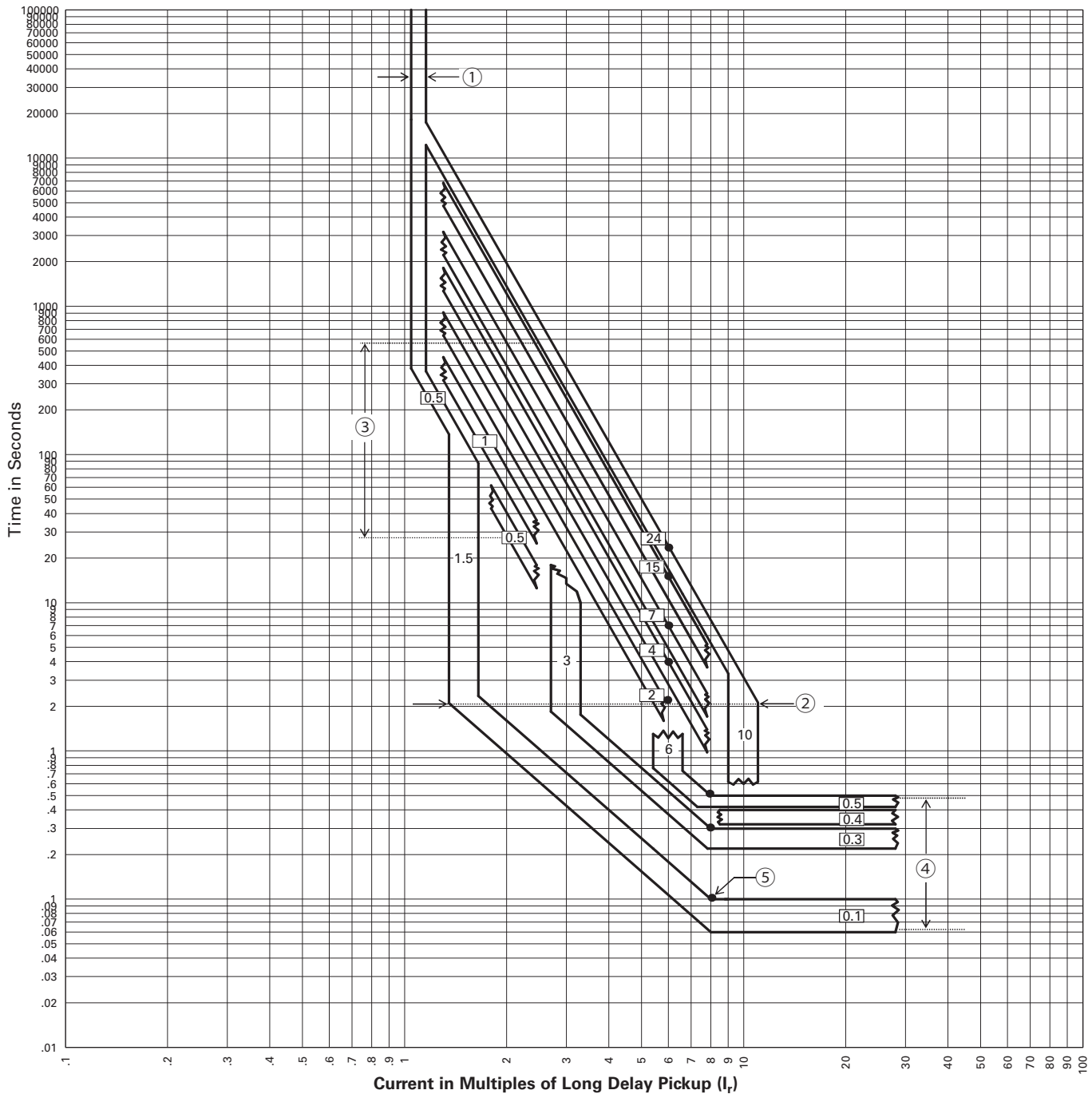
1. This curve shown as a multiple of the LONG PU setting(I_r). The actual pickup point occurs at 110% of the I_r , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_r , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I^2T . The short pickup points have $\pm 10\%$ tolerance.
time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s.
tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I^2T slopes flattens out at 8x of I_r for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I^2T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions.

New Generation Air Circuit Breaker IZM99

Tripping Curves

IZM99...V(U)...PXR20/25 Long Delay(L) Curves

L-Protection: I²t-Characteristic curve



Notes:

1. This curve shown as a multiple of the LONG PU setting(I_r). The actual pickup point occurs at 110% of the I_r , with $\pm 5\%$ tolerance.
2. SDPU = 1.5x to 10x of I_r , have 100% $\pm 10\%$ tolerance.
3. LD Time = 0.5s to 24s, have 100% +0 / -30% tolerance.
4. SD Slope = I²T. The short pickup points have $\pm 10\%$ tolerance. time setting from 0.1s to 0.5s, with steps of 0.1s, except 0.2s. tolerance is 100% +0 / -30% except 0.1s, has tolerance 100% +0 / -40%.
5. I²T slopes flattens out at 8x of I_r for top of band with FLAT time minimum value prevailing for bottom of band. For all curves the lower flat response time value projected to I²T line will determine the other break point and shape of the curve.
6. If long delay thermal memory is enabled, trip times may be shorter than indicated in this chart.
7. Curves applies from -20°C to +50°C ambient. Temperatures above +85°C will cause over temperature trip.
8. This curve is for 50Hz, 60Hz applications.
9. These curves are comprehensive for series IZM99 circuit breakers including all frame sizes, ratings, and constructions. The total clearing times shown include the response time for trip unit, the breaker opening and the interruption of the current.

Temperature Derating

	Rated Current	4000A	5000A	63000A
IZM99	40°C [A]	4000	5000	6300
	50°C [A]	4000	5000	6200
	60°C [A]	4000	5000	5600
	70°C [A]	4000	5000	5100

Altitude Derating Factors

Altitude [m]	Voltage Correction	Current Correction
2000	1.000	1.000
2150	0.989	0.998
2300	0.976	0.995
2450	0.963	0.993
2600	0.950	0.990
2750	0.933	0.987
2900	0.917	0.983
3050	0.900	0.980
3200	0.883	0.977
3350	0.867	0.973
3500	0.850	0.970
3650	0.833	0.967
3800	0.817	0.963
3950	0.800	0.960
5000	0.700	0.940

Notes

IZM9 series circuit breakers can be applied at their full voltage and current ratings up to a maximum altitude of 2000 meters above sea level. When installed at higher altitudes, the ratings are subject to correction factors. Short circuit current is not affected as long as the voltage is rated in accordance with the table.

New Generation Air Circuit Breaker IZM99

Terminal Assignment of Control Circuit Terminals

IZM99 Control Circuit Terminal Assignment

1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47
E01 +		OT1C	OT1B	OT2C	N1	ALMC	ALM2	G1	+24V	ZIN	ZCOM	CMM1	CMM3	PTVA	PTVC	MODB	MODG	ZCMM	ZCMM	ARCO			
E02 -	SC	OT1M	OT2B	OT2M	N2	ALM1	ALM3	G2	AGND	ARMS	ZOUT	CMM2	CMM4	PTVB	PTVN	MODB	ZCMM	ZCMM	ARCO	ARCO			
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48

1, 2 - Motor operator

4 - Message :Spring energy store tensioned

5~7 - Overload trip switch 1 (OTS) (5-COM, 6-N.O, 7-N.C.)

8~10 - Overload trip switch 2 (OTS)/ (8-NC, 9-COM,10-NO)

11,12 - External neutral sensor

13~16 - Alarm

17,18 - Ground fault source sensor

19, 20 - Control voltage supply 24VDC

21, 23,24 - Zone selectivity ZSI

20,22 - ARMs

25-28 - External CAM module

29~32 - PT module

33~35 - Onboard ModBus

36~39 - External CAM module (reserved)

40~42 - ARCON(reserved)

3, 88, 95, 96, 43~48 – reserved

49	51	53	55	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95
C1	B1	C2	C3	B3	C4	C5	B5	C6	C7	B7	C8	C9	B9	C10	C11	B11	C12	LCC	LCB	ST1	SR1	UV1+	
A1	B2	A2	A3	B4	A4	A5	B6	A6	A7	B8	A8	A9	B10	A10	A11	B12	A12	LCM		ST2	SR2	UV2	
50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96

49~84 - Auxiliary contact (C-COM, A- NO, B-NC)

85~87 - Latch check switch (85-COM, 86-NO, 87-NC)

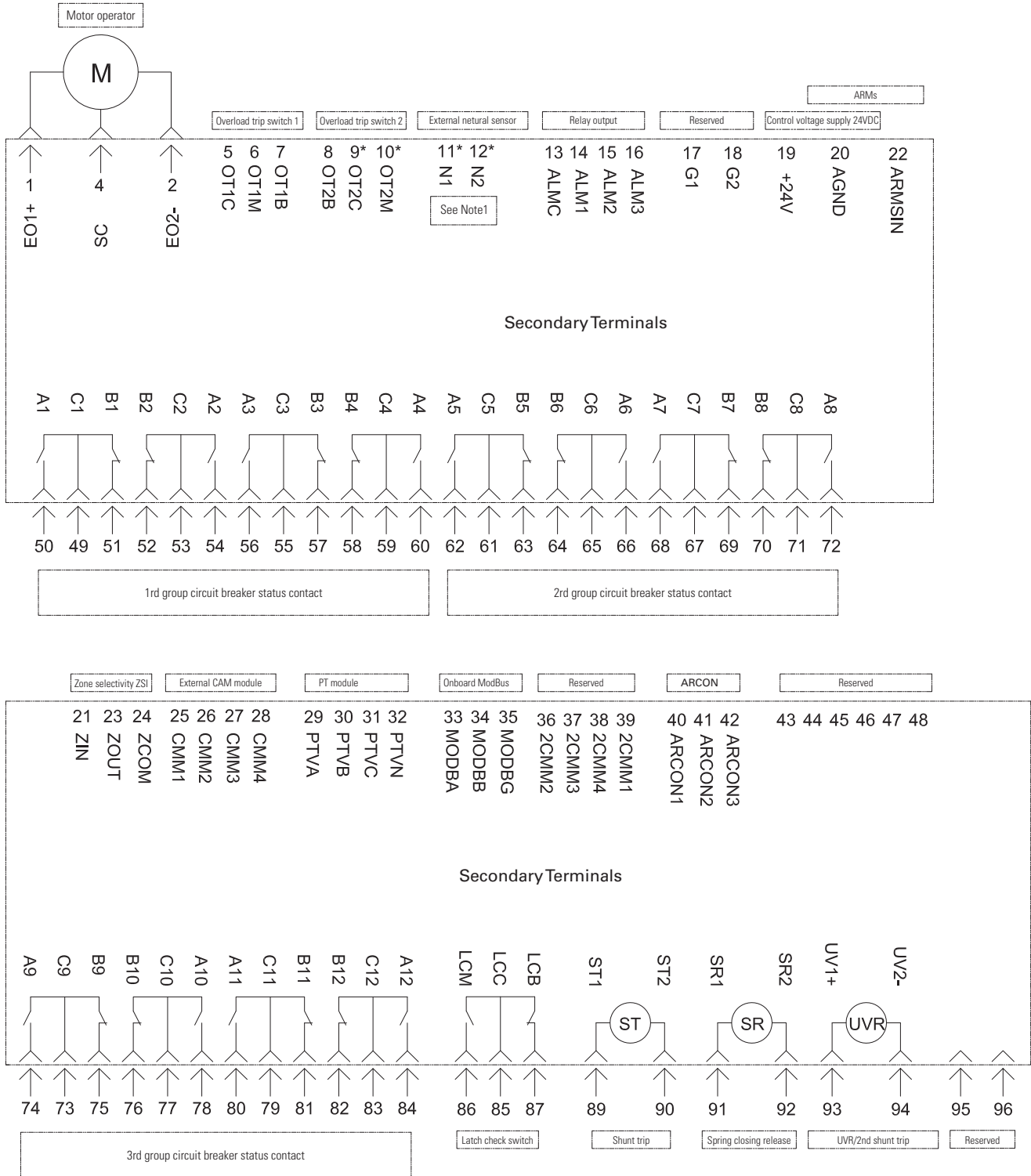
89, 90 - Shunt trip

91, 92- Spring closing release

93, 94 - UVR/2nd shunt trip

IZM99 control circuit internal wiring diagram

PXR20&25 wiring diagrams



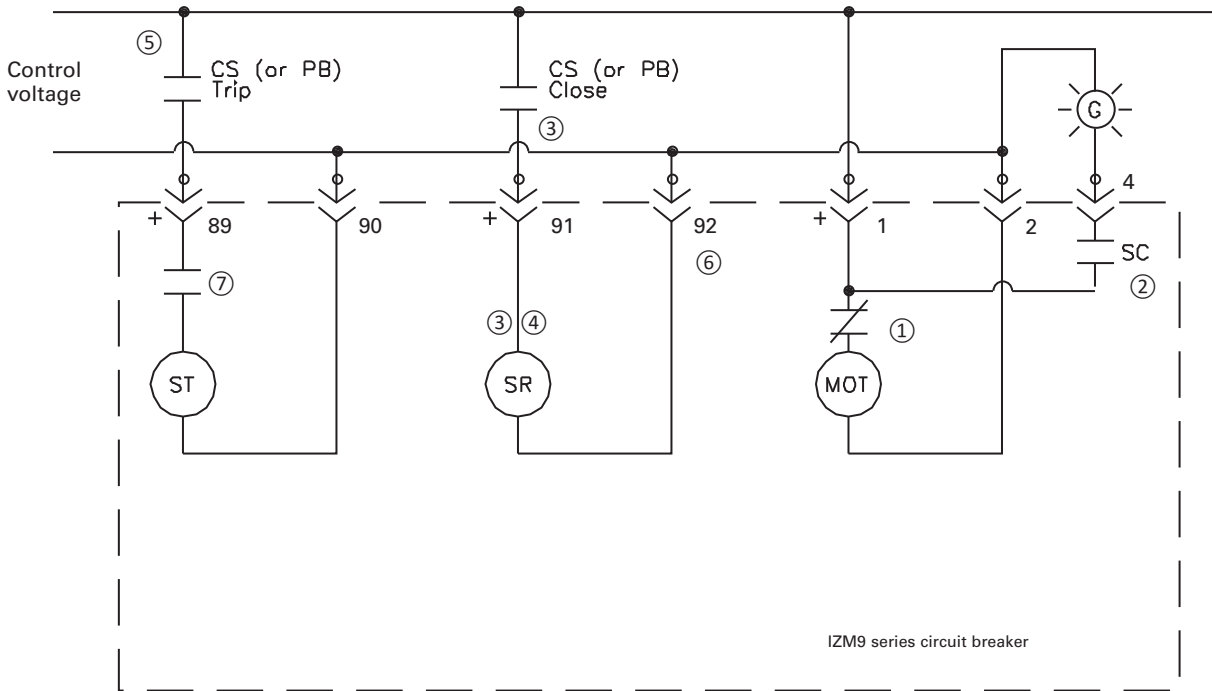
Note 1:

On a 4P circuit breaker, the neutral current sensor has the same style and wiring method as the phase sensor, located within the circuit breaker frame, no need to connect the secondary terminals 11N1, 12N2

New Generation Air Circuit Breaker IZM99

Circuit breaker wiring diagram

Electrical control diagram of IZM 99 circuit breakers – Open/Close and motor



Legend:

MOT – Motor Operator for Charging Closing Spring

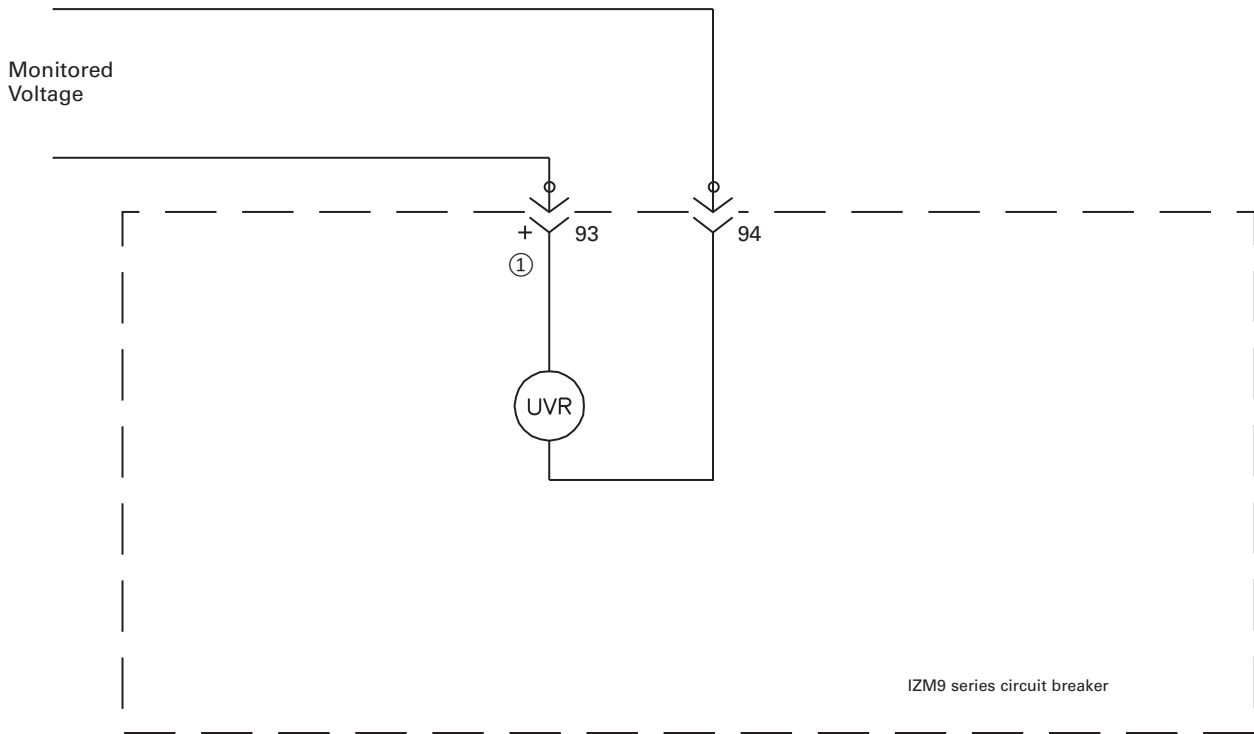
ST – Shunt Trip

SR – Spring Release

Description of Operation:

1. The motor is energized and runs, charges closing spring, and is cut off by switch.
2. When the spring is charged, the SC closes and the green indicating light will illuminate (if applicable).
3. Closing the CS-C contact energizes the Spring Release Coil and closes the circuit breaker. The Spring Release internal electronics pulse the SR coil and then provides a high impedance circuit. This provides anti-pumping.
4. When the spring discharges its energy, the motor switch will re-energize the charging motor until the spring is charged again.
5. When the circuit breaker closes, contact 7 closes, then energize the Shunt release, the circuit breaker disconnects, and contact 7 then breaks.
6. For secondary contacts, odd numbers should be treated as positive for any accessory. This will not apply to AC ratings.
7. Reference Page 66 for internal circuit breaker wiring.

IZM99 Under Voltage Release



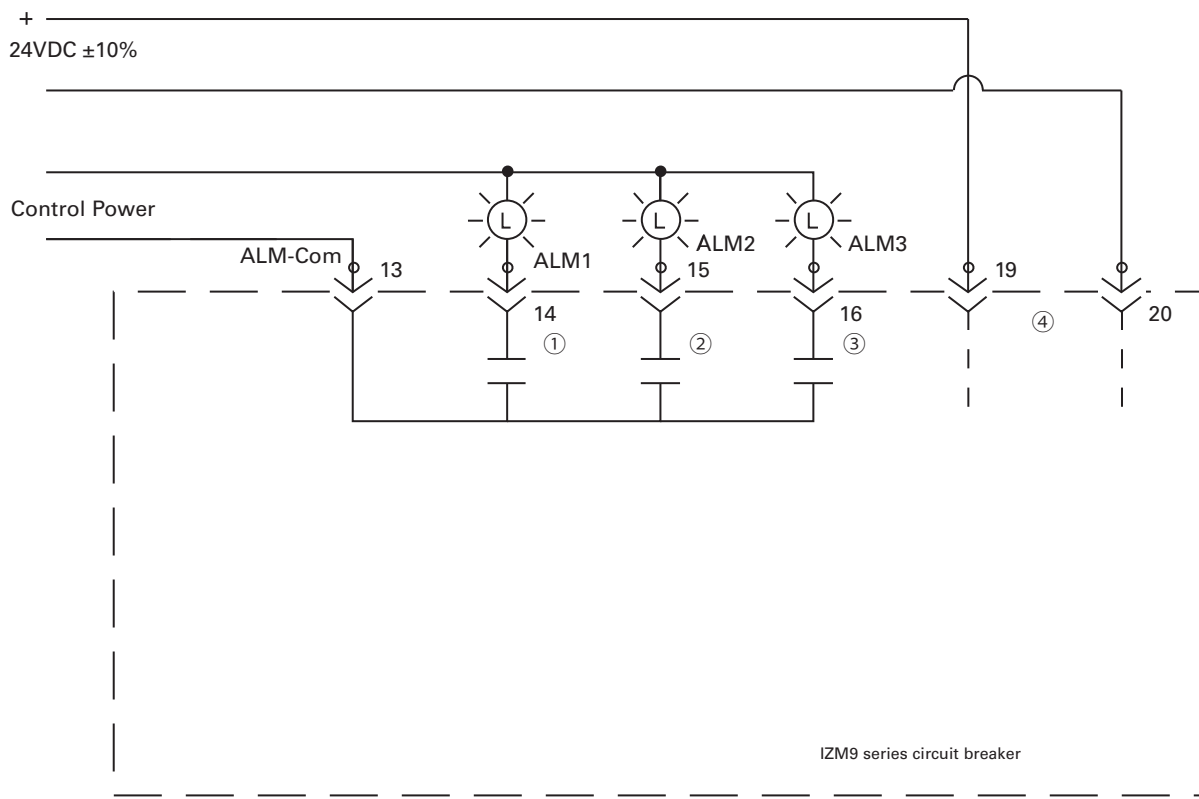
Notes:

1. Treated as the positive voltage for DC ratings.

New Generation Air Circuit Breaker IZM99

Circuit breaker wiring diagram

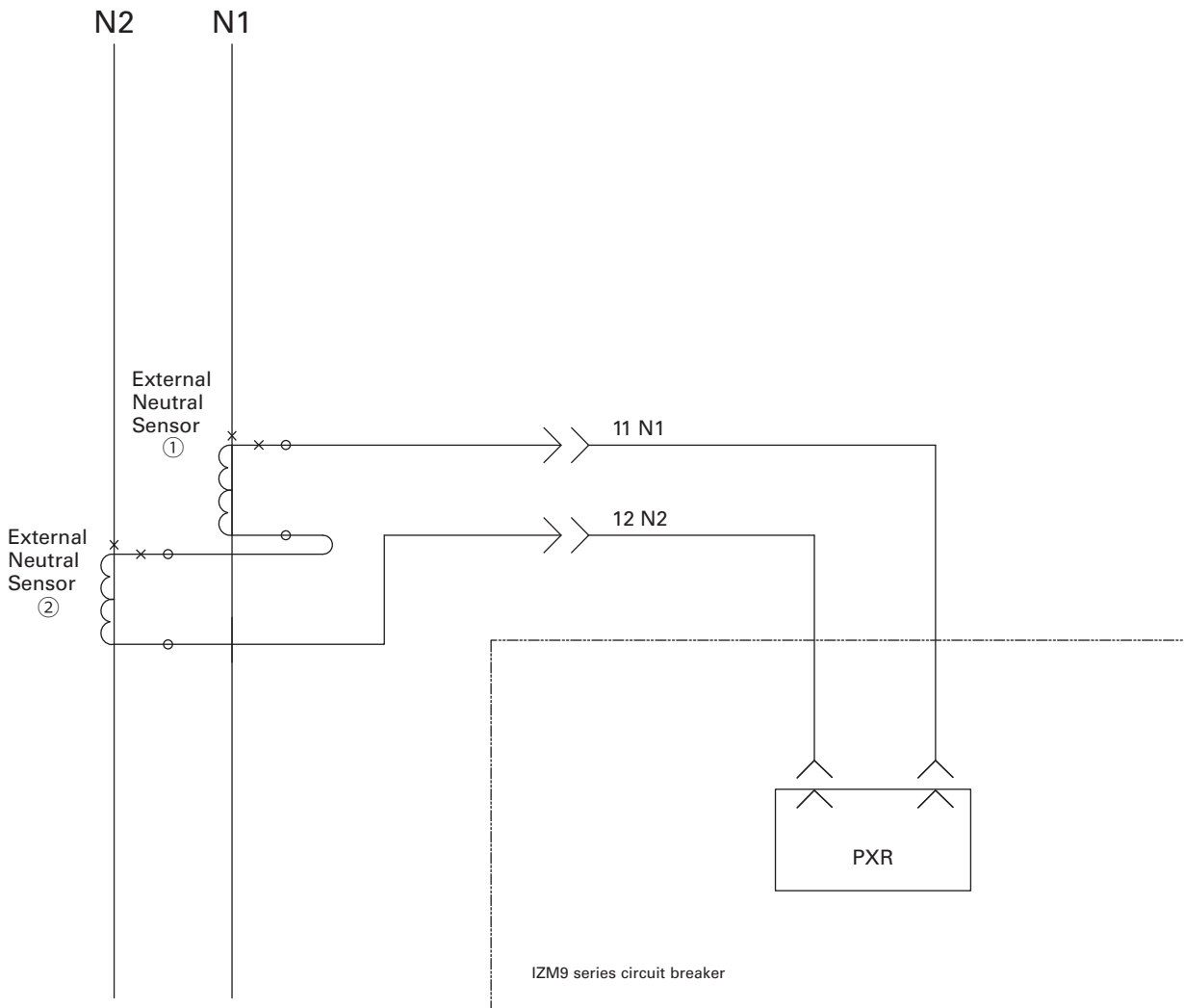
PXR Alarm Wiring



Notes:

1. For the PXR20/25, the Alarm 1 is for Remote Indication/ Maintenance Mode indication. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
2. For the PXR20/25, the Alarm 2 is for High Load alarm/Ground Fault alarm. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
3. For the PXR20/25, the Alarm 3 is for Trip N.O. contact. Contact rating 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
4. If the control voltage is +24 Vdc, the trip unit should be fed from a separate, galvanically isolated + 24 V voltage dc supply.

Ground Fault Residual, 3 pole, 4 pole (IZM99 4000-6300A)



Notes1, 2:

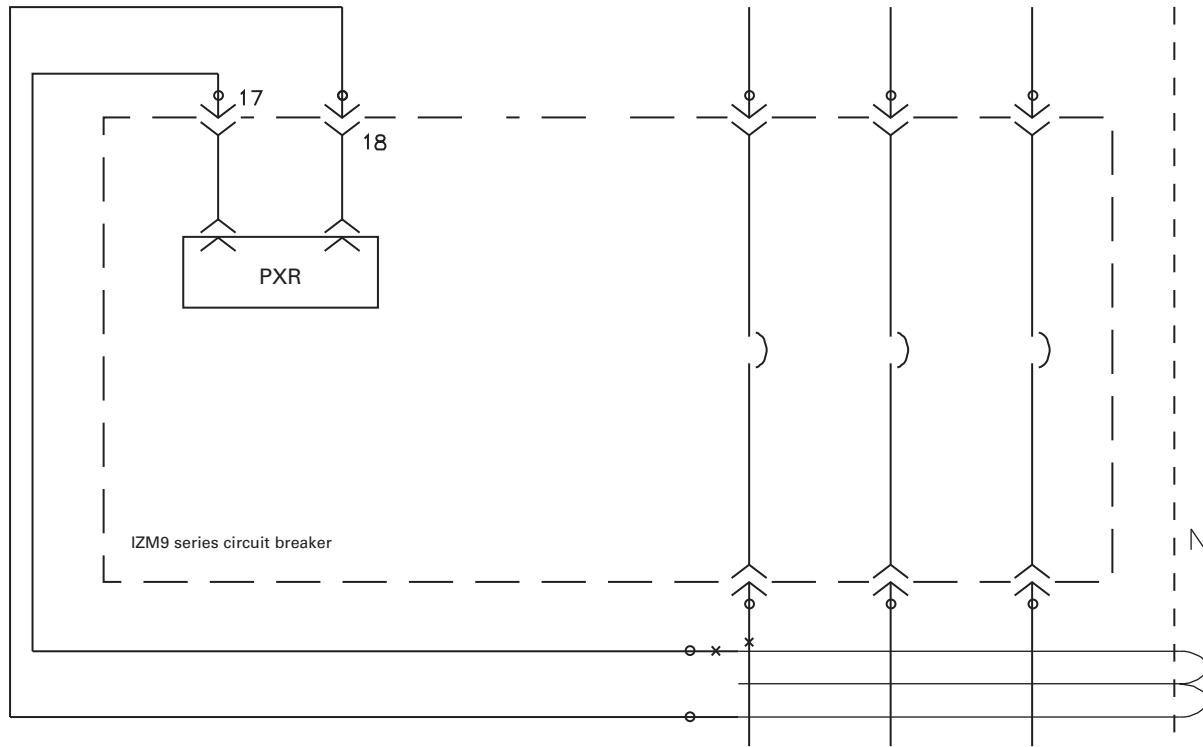
Sensor is customer wired to sense neutral currents. This is required for 3 pole ,4 pole ACB no need to buy the external sensor.

Two external neutral transformers must be purchased for the two N-bars of the IZM99 circuit breakers, with serial connection to 11&12

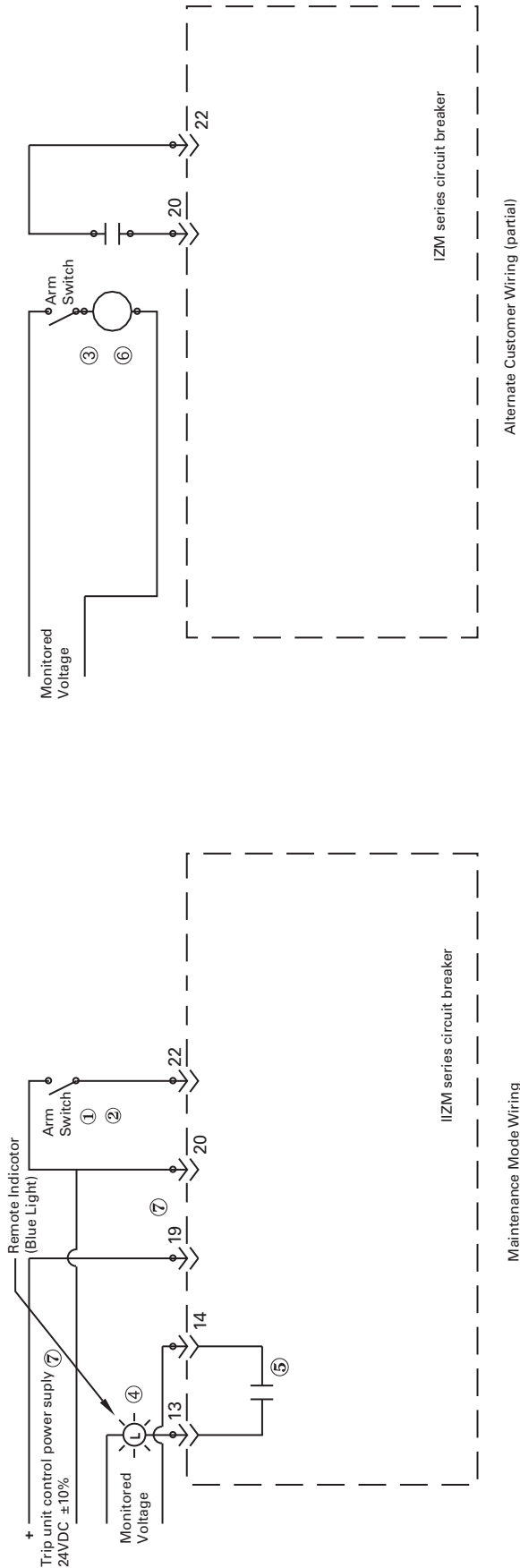
New Generation Air Circuit Breaker IZM99

Circuit breaker wiring diagram

Zero Sequence Ground Fault Sensing



Maintenance Mode Wiring



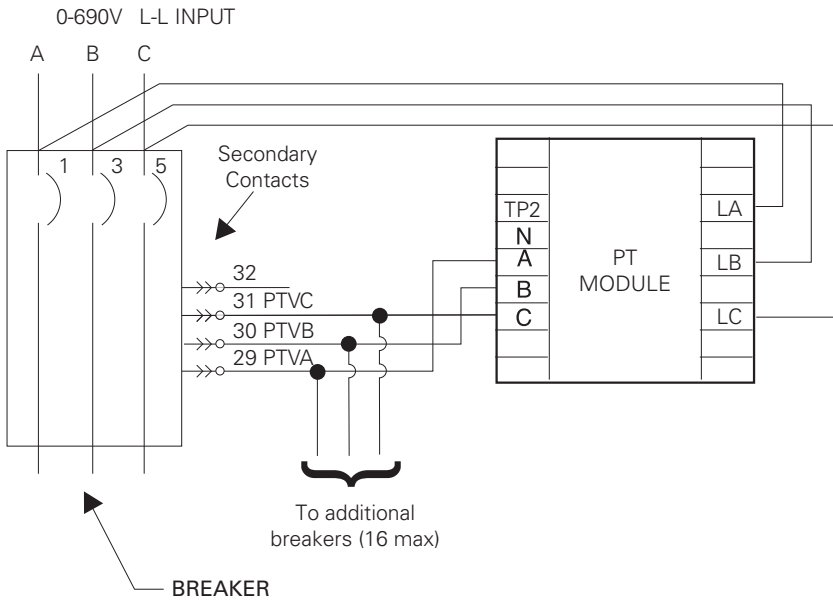
Notes:

1. PXR20/25 can locally be placed in Maintenance Mode via a two position switch located on the trip unit. The function can be armed via a remote switch as shown. In addition, the function can be activated via communication modules. A blue LED on the PXR verifies the PXR release in Maintenance Mode.
2. The recommended selector switch for this low voltage application is Eaton part number 10250T133-2E which includes a contact block rated for logic level and corrosive use.
3. The maximum length of this wiring to remotely arm the switch (or alternate relay contact) is 9.78 feet (3 m). Use #20 AWG wire or larger.
4. A remote Stack Light Annunciator panel or other remote indication device can be connected to verify that PXR is in the Maintenance Mode.
5. The relay in the PXR release makes when in Maintenance Mode. Contact is rated 1 A @ 120 Vac, 1 A @ 24 Vdc, and 0.5 A @ 230 Vac.
6. The PXR release can also be placed remotely in its Maintenance Mode via a general purpose relay (ice cube type with logic level contacts) and activated by a remote control switch. A recommended type is IDEC Relay RY22. Choose the voltage as desired.
7. If a Communication Module is used, The Communication Module will require 24 Vdc power and will provide isolated power to the PXR release in the circuit breaker. If a Communication Module is not used, the PXR release that requires auxiliary voltage for alarms which should be fed from a galvanically isolated, 24 Vdc supply.

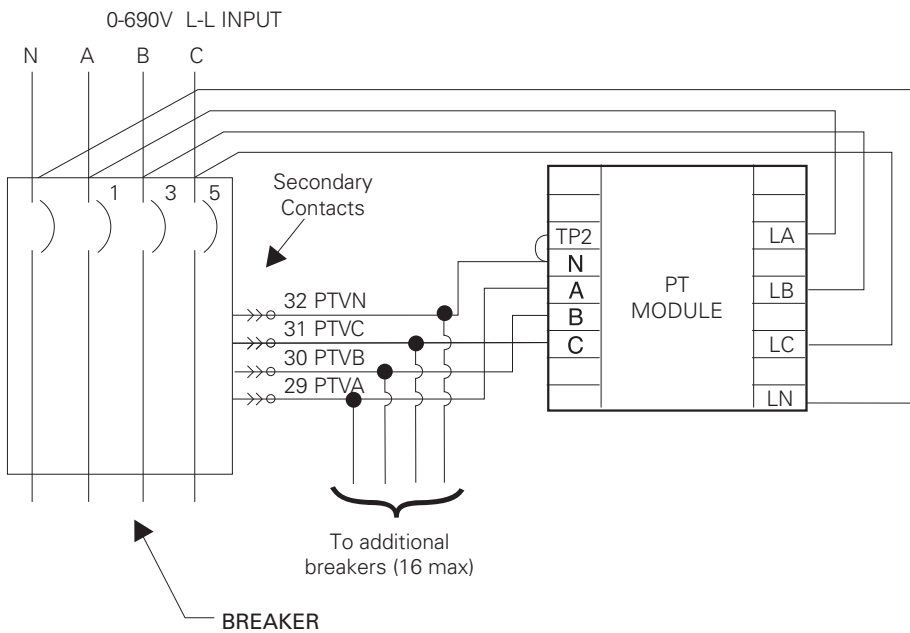
New Generation Air Circuit Breaker IZM99

Circuit breaker wiring diagram

External PT Module for PXR25 U type trip unit

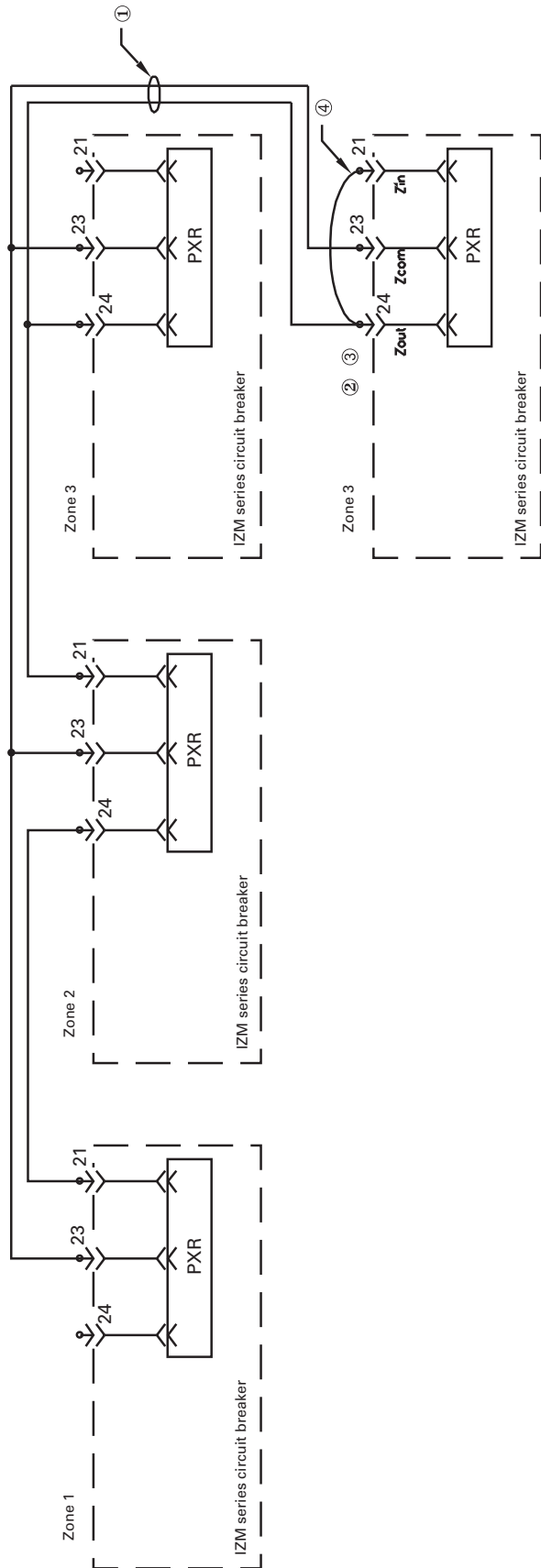


IZM circuit breaker - 3 pole - 3 wire



IZM circuit breaker - 3 pole or 4 pole - 4 wire

Zone Interlock Wiring



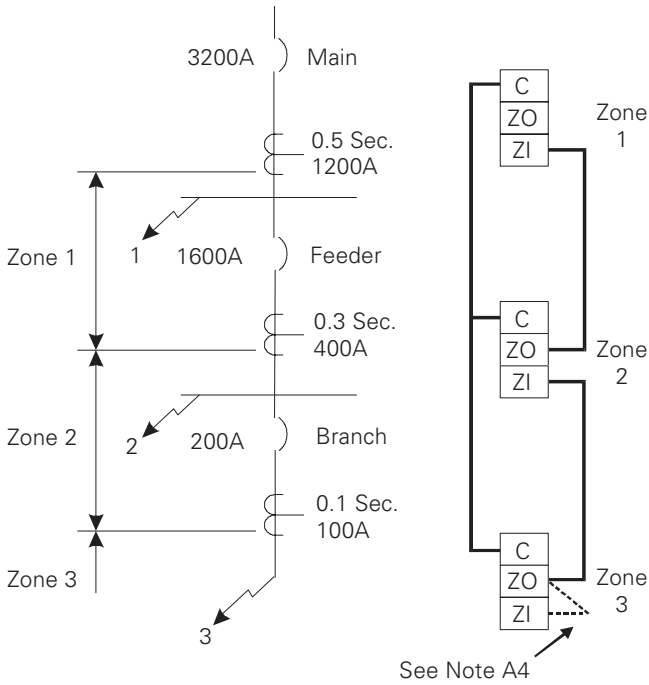
Notes:

1. Twisted together AWG #14 to #20 copper wire. Route the Zone Interlock wiring separate from power conductors. DO NOT GROUND any Zone Interlock wiring.
2. The maximum distance between two farthest breakers on different zones (from the Z_{out} downstream to the Z_{in} upstream terminals) is 250 feet (75 m).
3. A maximum of 20 breakers may be contained in parallel in one zone.
4. Provide a self interlocking jumper (on Zone 3), if coordination is desired with other downstream breakers not providing the Zone Interlock feature.

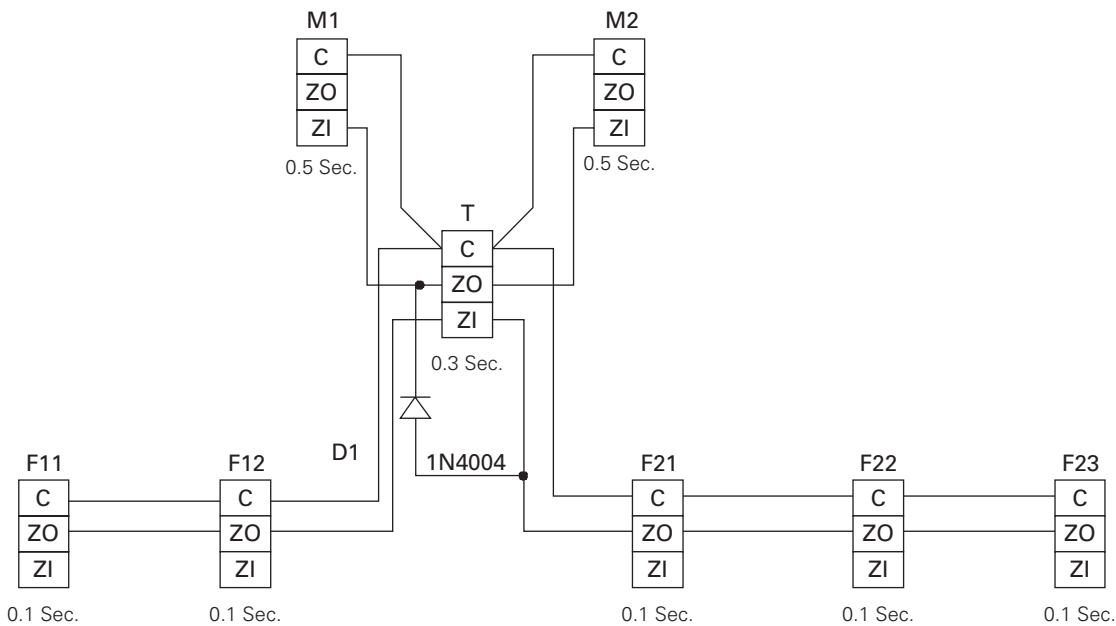
New Generation Air Circuit Breaker IZM99

Circuit breaker wiring diagram

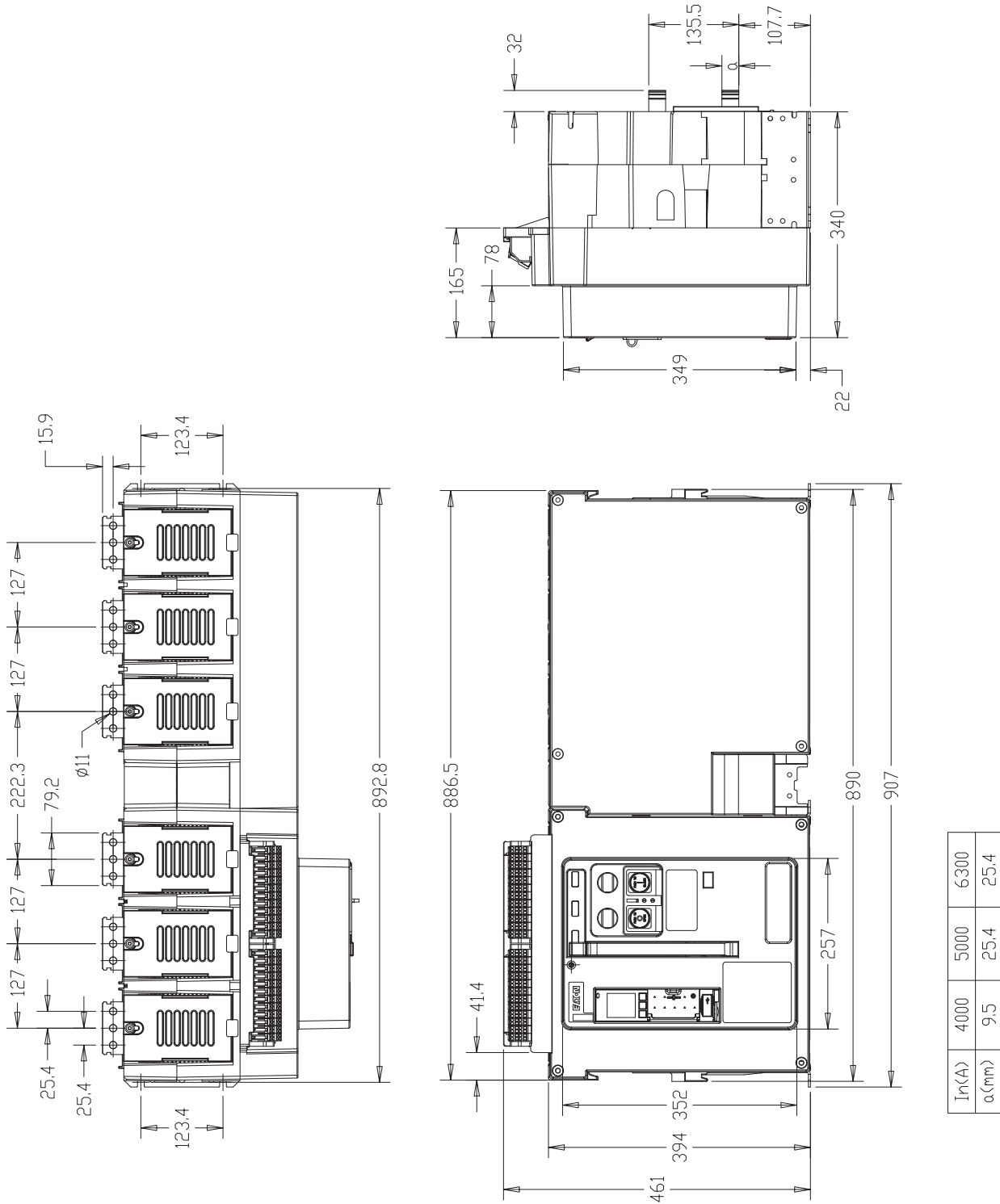
Typical Zone Interlocking



Typical Zone Interlocking Connections with Two Main Breakers (M1, M2) and a Tie Breaker (T)



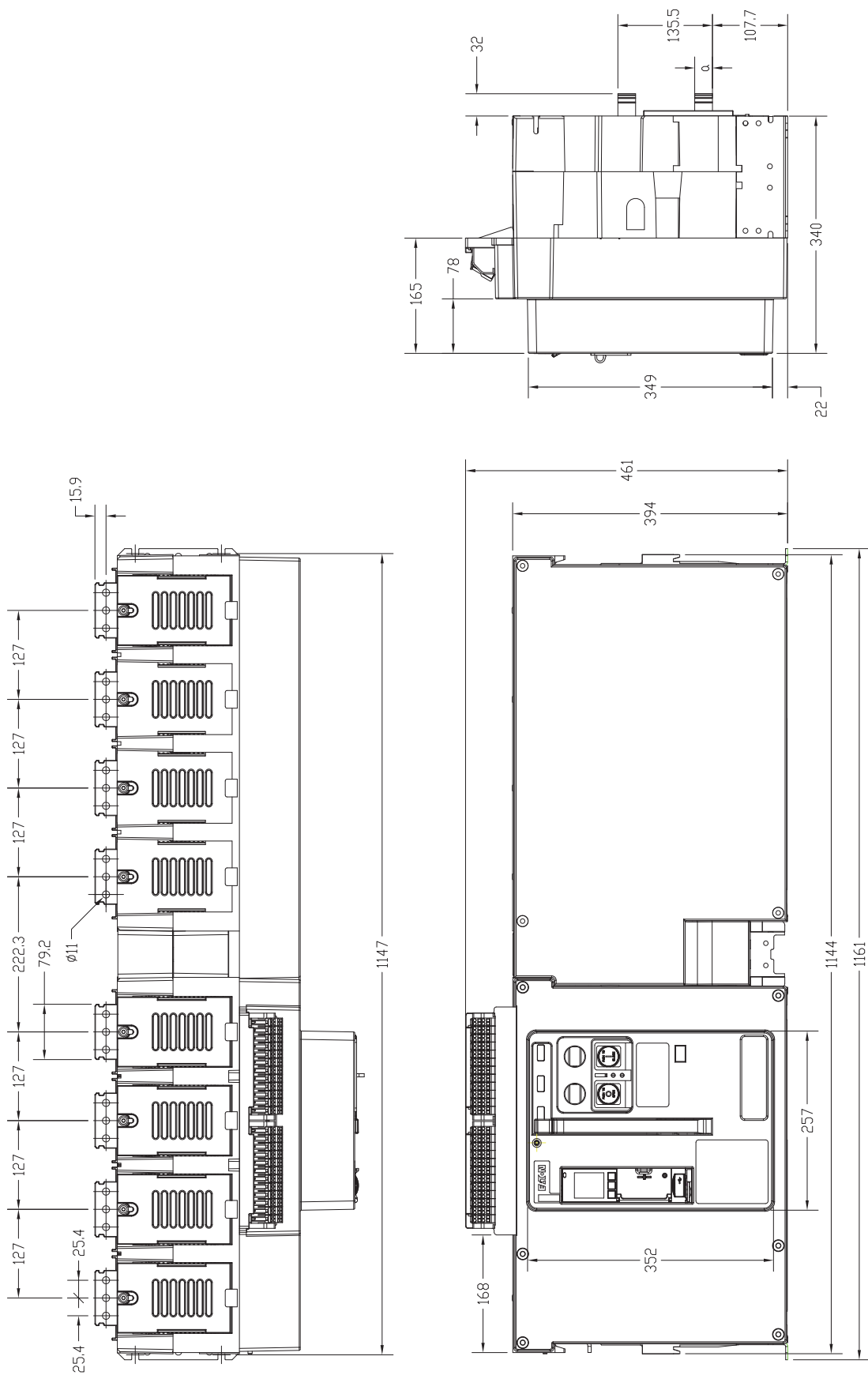
IZM99 Fixed Type Dimensions and Horizontal Board Dimensions (3P, 4000~6300A)



New Generation Air Circuit Breaker IZM99

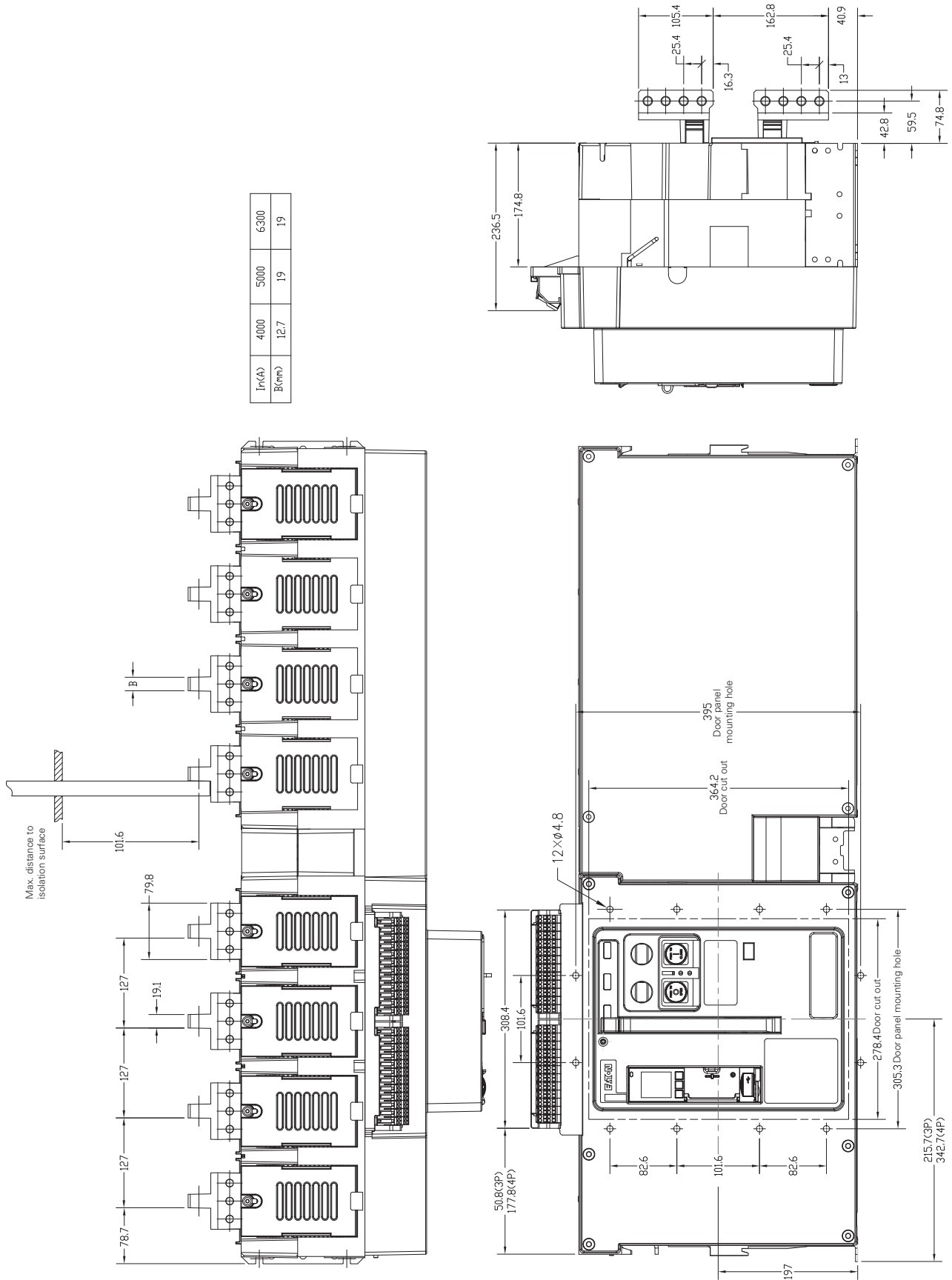
Basic Device Dimensions

IZM99 Fixed Type Dimensions and Horizontal Board Dimensions (4P, 4000~6300A)



In(A)	4000	5000	6300
α (mm)	9,5	25,4	25,4

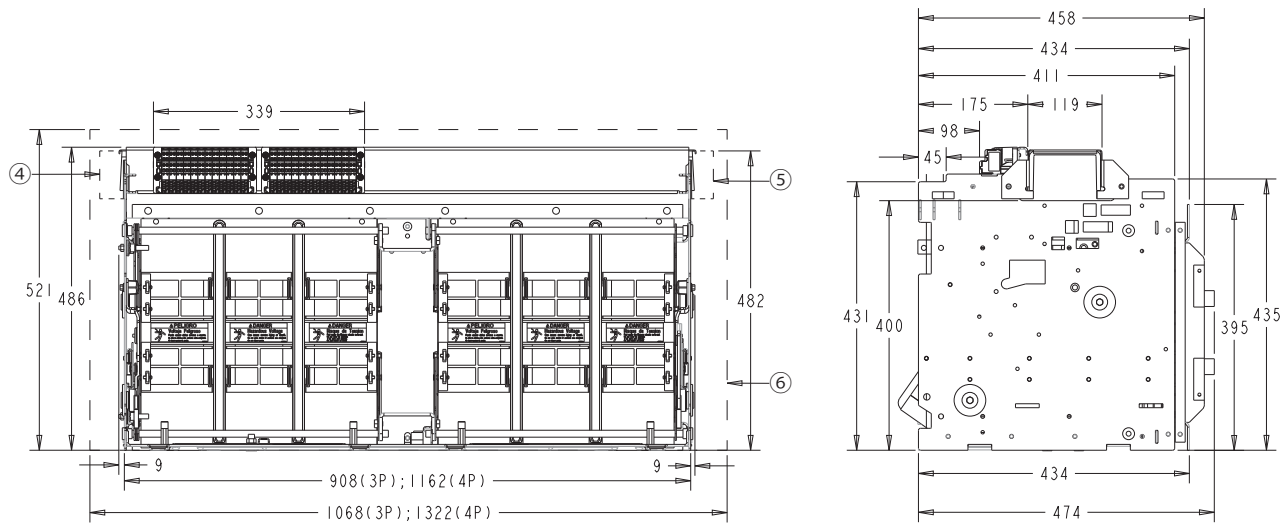
IZM99 Fixed Type Panel Cutout and External Vertical Board Dimensions (3P and 4P, 4000~6300A)



New Generation Air Circuit Breaker IZM99

Basic Device Dimensions

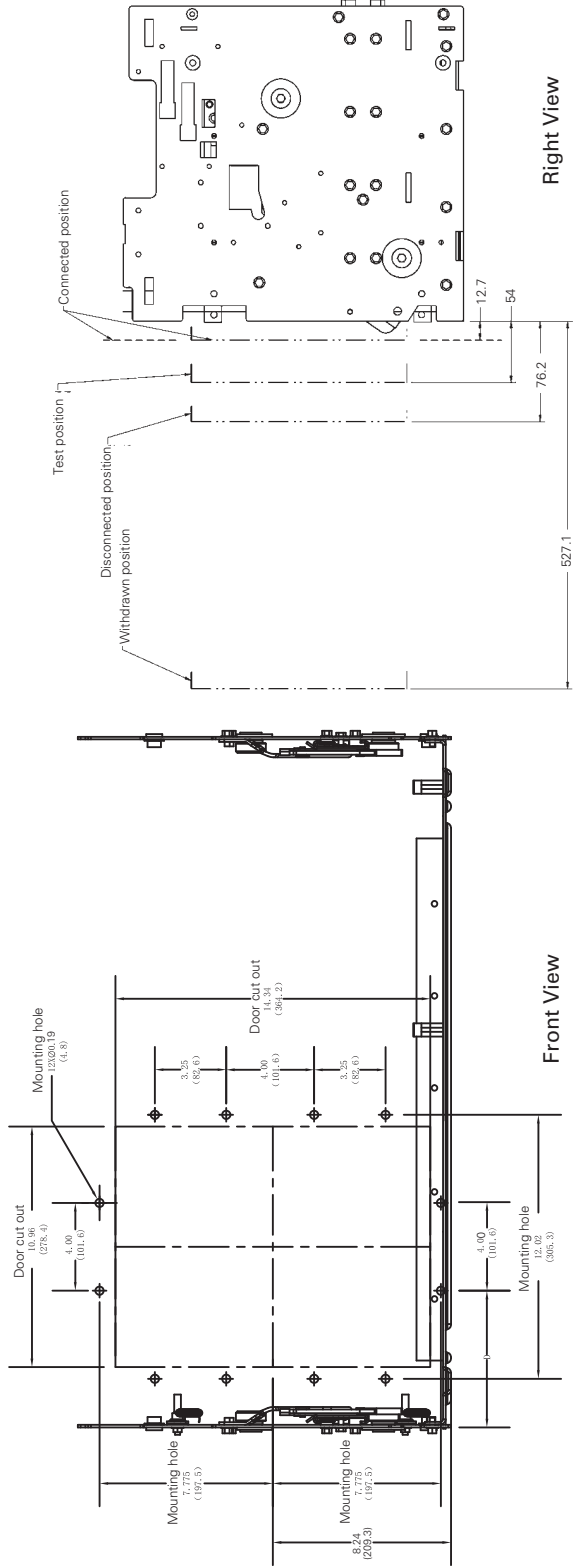
IZM99 Withdrawable Type Dimensions (3P and 4P, 4000~6300A)



Notes: ④⑤ Drawer switch position ⑥ Recommended minimum mounting space

IZM99 Withdrawable Type Panel Cutout Dimensions (3P and 4P, 4000~6300A)

ITEM	D
3 POLE	6.85 [168.10]
4 POLE	11.80 [299.10]



Panel cutout size and circuit breaker position

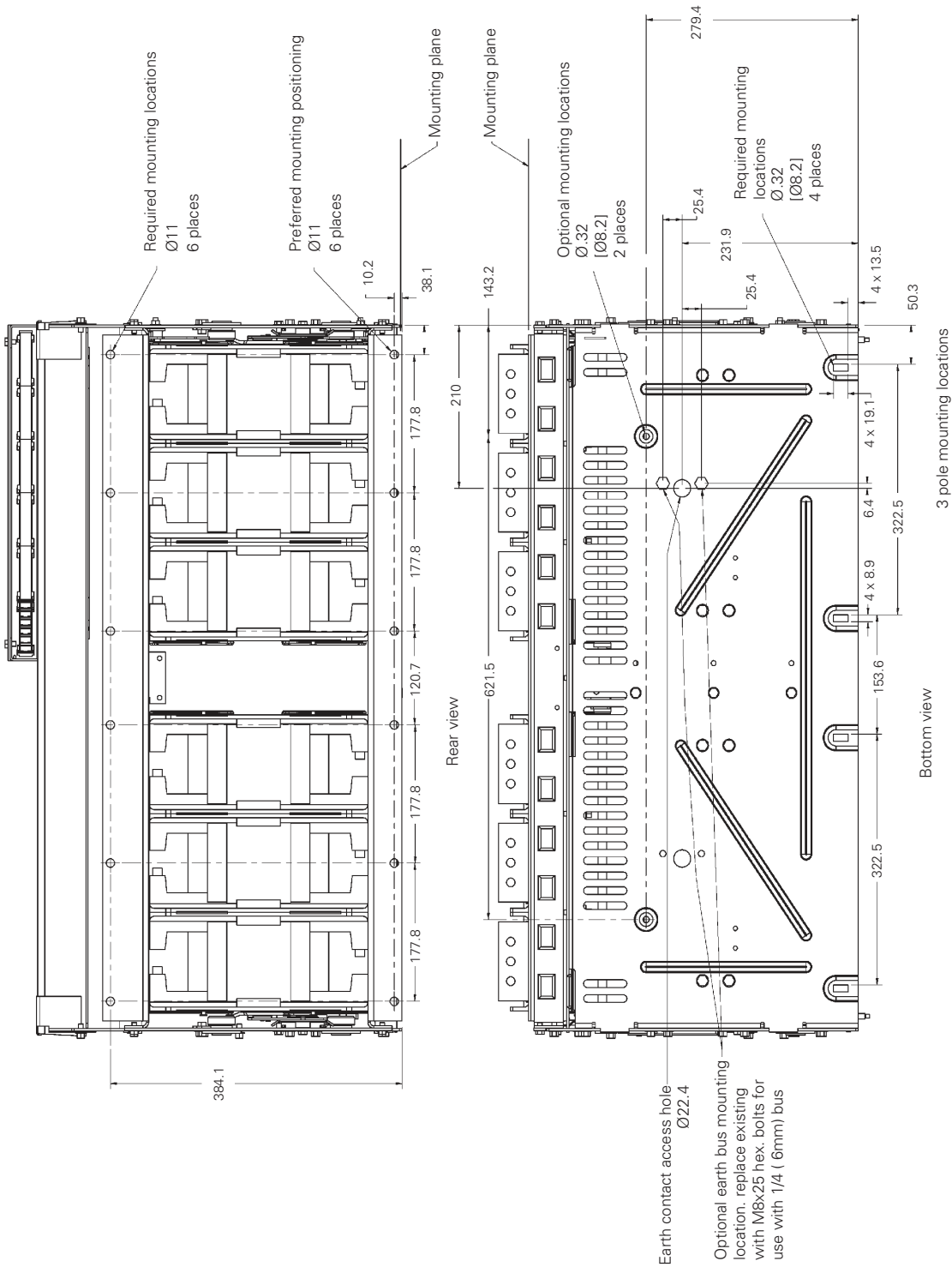
- Note:**
1. Mperial dimensions are inches on top metric dimensions are [mm] bottom.
 2. All dimensions are reference only
 3. Tolerance range is shown as follow:

0 ~ 5mm	±0.1mm
5 ~ 10mm	±0.2mm
10 ~ 50mm	±0.5mm
50 ~ 200mm	±3.0mm

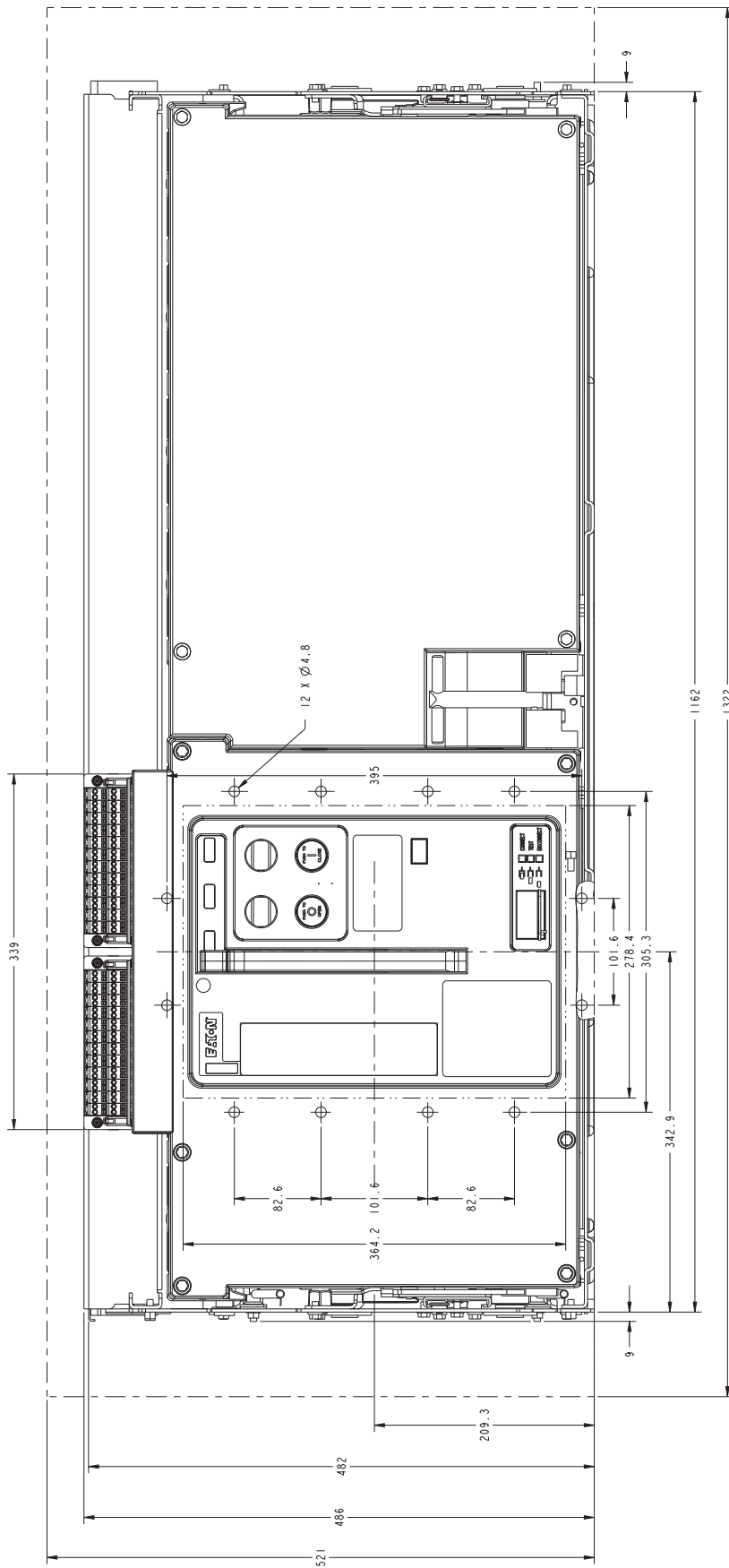
New Generation Air Circuit Breaker IZM99

Basic Device Dimensions

IZM99 Withdrawable Type Cassette Dimensions and Mounting Dimensions (3P, 4000–6300A)



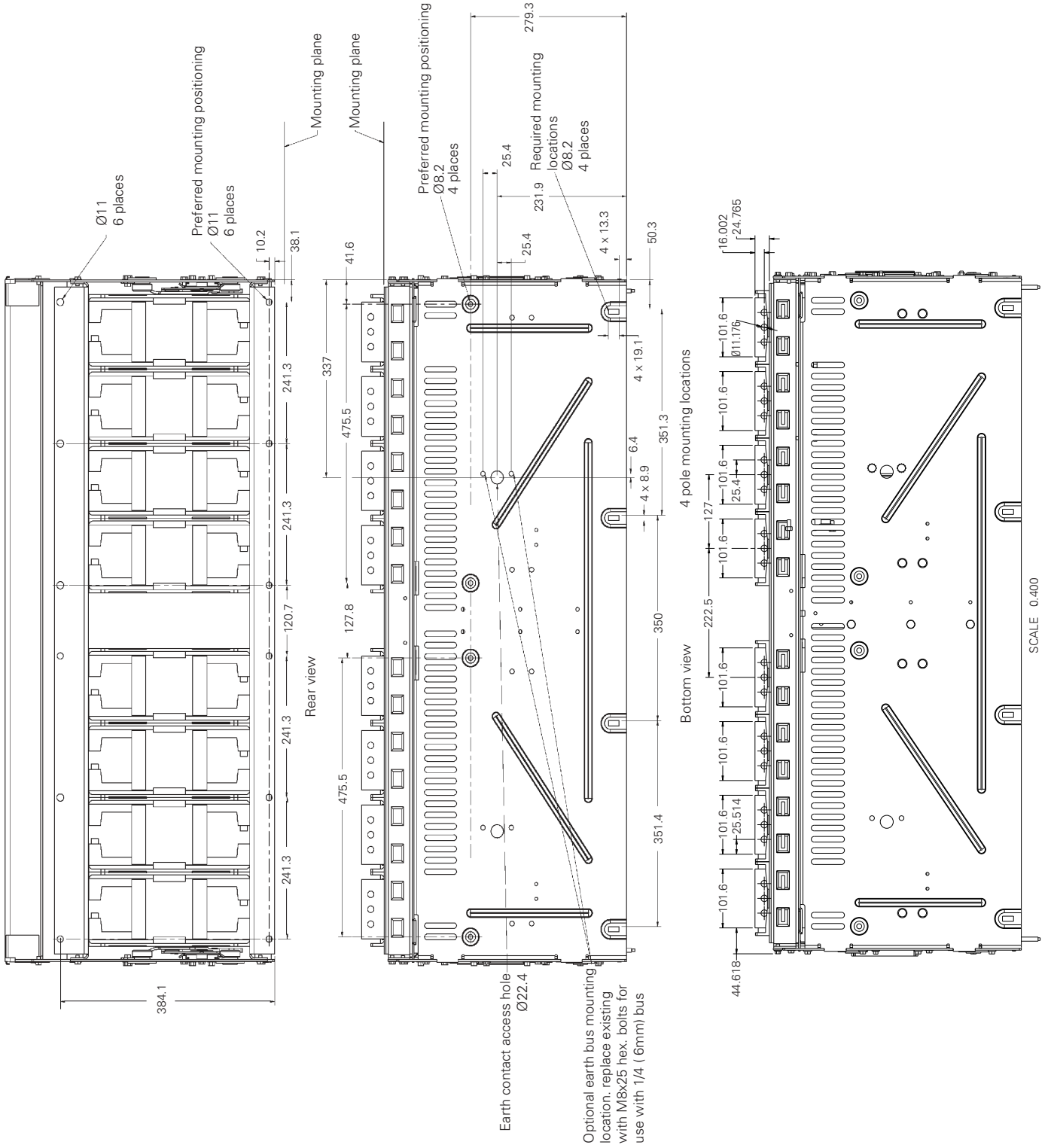
IZM99 Withdrawable Type Cassette Dimensions and Mounting Dimensions (4P, 4000~6300A)



New Generation Air Circuit Breaker IZM99

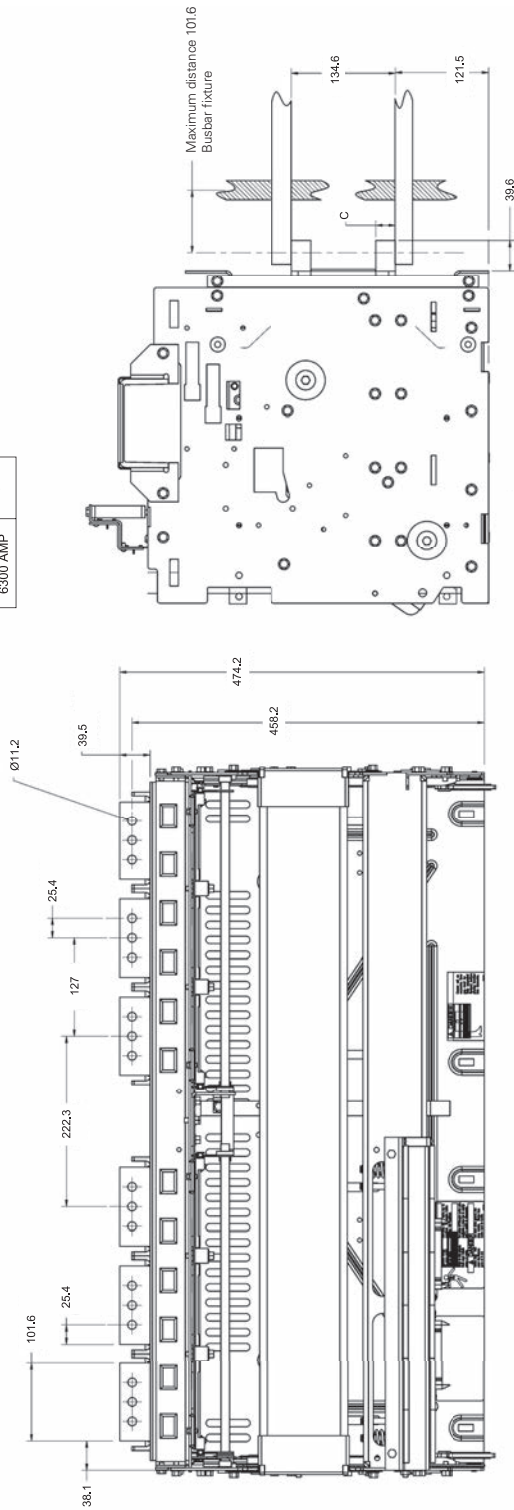
Basic Device Dimensions

IZM99 Withdrawable Type Cassette Dimensions and Mounting Dimensions (4P, 4000-6300A)



IZM99 Withdrawable Type Cassette Horizontal Board Wiring Dimensions (3P - 4000~6300A)

Item	C
4000 AMP	9.7
5000, 6300 AMP	25.4



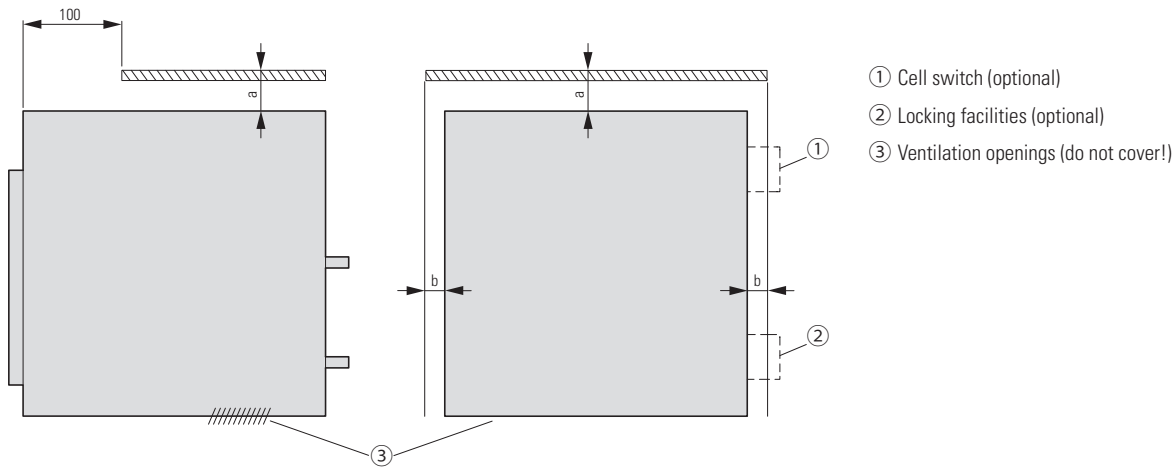
3P

New Generation Air Circuit Breaker IZM99

Minimum Clearances

Recommended safety clearances

The following information about safety distances is intended to provide a guideline for the installation of circuit-breakers in an enclosure.



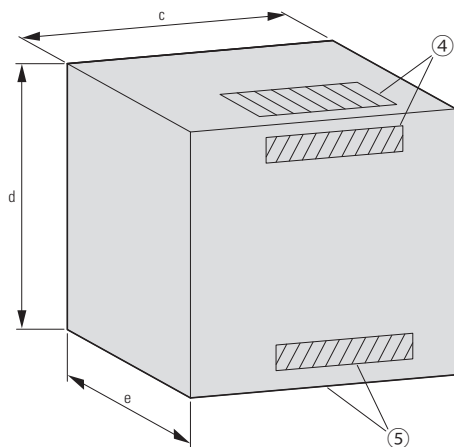
	Enclosure clearance	To insulated surface mm	To grounded metal surface mm	With cell switch or locking facilities mm
Withdrawable	a	0	0	0
	b	25	25	25/75
Fixed	a	150	250	–
	b	30	70	–

Recommended enclosure clearance and ventilation

The illustration shows a typical enclosure.

The table below lists the associated minimum distances between enclosures and ventilation openings.

This information is intended as a guideline for constructing a suitable circuit-breaker enclosure. Ensure the integration complies with IEC 61439.



c	Width of cassette + 75 mm
d	550 mm
e	450 mm (front control panel bay)
Ventilation holes	160 cm ² (800 - 3200 A) } Top and bottom 320 cm ² (4000 A)

④ Top or rear vent

⑤ Rear or lower vent

Standard device includes:

Fixed circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220V AC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module.

Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZM99	4000	85	IZM99N3C-V40CF	YC-90000205	IZM99N4C-V40CF	YC-90000217
	5000	85	IZM99N3C-V50CF	YC-90000206	IZM99N4C-V50CF	YC-90000218
	6300	85	IZM99N3C-V63CF	YC-90000207	IZM99N4C-V63CF	YC-90000219
	4000	100	IZM99H3C-V40CF	YC-90000208	IZM99H4C-V40CF	YC-90000220
	5000	100	IZM99H3C-V50CF	YC-90000209	IZM99H4C-V50CF	YC-90000221
	6300	100	IZM99H3C-V63CF	YC-90000210	IZM99H4C-V63CF	YC-90000222
	4000	85	IZM99N3C-U40CF	YC-90000211	IZM99N4C-U40CF	YC-90000223
	5000	85	IZM99N3C-U50CF	YC-90000212	IZM99N4C-U50CF	YC-90000224
	6300	85	IZM99N3C-U63CF	YC-90000213	IZM99N4C-U63CF	YC-90000225
	4000	100	IZM99H3C-U40CF	YC-90000214	IZM99H4C-U40CF	YC-90000226
	5000	100	IZM99H3C-U50CF	YC-90000215	IZM99H4C-U50CF	YC-90000227
	6300	100	IZM99H3C-U63CF	YC-90000216	IZM99H4C-U63CF	YC-90000228

Standard device includes:

Withdrawable circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220VAC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module, protection shutter, arc chamber cover, cassette, handle.

Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZM99	4000	85	IZM99N3C-V40CW	YC-90000181	IZM99N4C-V40CW	YC-90000193
	5000	85	IZM99N3C-V50CW	YC-90000182	IZM99N4C-V50CW	YC-90000194
	6300	85	IZM99N3C-V63CW	YC-90000183	IZM99N4C-V63CW	YC-90000195
	4000	100	IZM99H3C-V40CW	YC-90000184	IZM99H4C-V40CW	YC-90000196
	5000	100	IZM99H3C-V50CW	YC-90000185	IZM99H4C-V50CW	YC-90000197
	6300	100	IZM99H3C-V63CW	YC-90000186	IZM99H4C-V63CW	YC-90000198
	4000	85	IZM99N3C-U40CW	YC-90000187	IZM99N4C-U40CW	YC-90000199
	5000	85	IZM99N3C-U50CW	YC-90000188	IZM99N4C-U50CW	YC-90000200
	6300	85	IZM99N3C-U63CW	YC-90000189	IZM99N4C-U63CW	YC-90000201
	4000	100	IZM99H3C-U40CW	YC-90000190	IZM99H4C-U40CW	YC-90000202
	5000	100	IZM99H3C-U50CW	YC-90000191	IZM99H4C-U50CW	YC-90000203
	6300	100	IZM99H3C-U63CW	YC-90000192	IZM99H4C-U63CW	YC-90000204

New Generation Air Circuit Breaker IZM99

IN99 Type Reference List

Standard device includes:

Fixed circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220V AC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module.

Switch Disconnecter, Fixed

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZM99	4000	85	IN99N3C-40CF	YC-90000301	IN99N4C-40CF	YC-90000304
	5000	85	IN99N3C-50CF	YC-90000302	IN99N4C-50CF	YC-90000305
	6300	85	IN99N3C-63CF	YC-90000303	IN99N4C-63CF	YC-90000306
	4000	100	IN99H3C-40CF	YC-90000307	IN99H4C-40CF	YC-90000310
	5000	100	IN99H3C-50CF	YC-90000308	IN99H4C-50CF	YC-90000311
	6300	100	IN99H3C-63CF	YC-90000309	IN99H4C-63CF	YC-90000312

Standard device includes:

Withdrawable circuit breaker basic device, shunt release (220V AD), closing release (220V AD), motor operator (220VAC), auxiliary contact (4a4b), trip signal auxiliary contact OTS (2a2b), door escutcheon, wiring terminal, 220VAC/DC power supply module, protection shutter, arc chamber cover, cassette, handle.

Switch Disconnecter, Withdrawable

Frame	Rated operational current I_n (A)	Switching capacity I_{cu} (kA)	3P		4P	
			Part no.	Article no.	Part no.	Article no.
IZM99	4000	85	IN99N3C-40CW	YC-90000289	IN99N4C-40CW	YC-90000292
	5000	85	IN99N3C-50CW	YC-90000290	IN99N4C-50CW	YC-90000293
	6300	85	IN99N3C-63CW	YC-90000291	IN99N4C-63CW	YC-90000294
	4000	100	IN99H3C-40CW	YC-90000295	IN99H4C-40CW	YC-90000298
	5000	100	IN99H3C-50CW	YC-90000296	IN99H4C-50CW	YC-90000299
	6300	100	IN99H3C-63CW	YC-90000297	IN99H4C-63CW	YC-90000300



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