IEK LOW VOLTAGE EQUIPMENT

2025

FORMAT PRO 2500/4000 А

ARMAT

AREAS OF APPLICATION

ARMAT ACB

AIR CIRCUIT BREAKERS

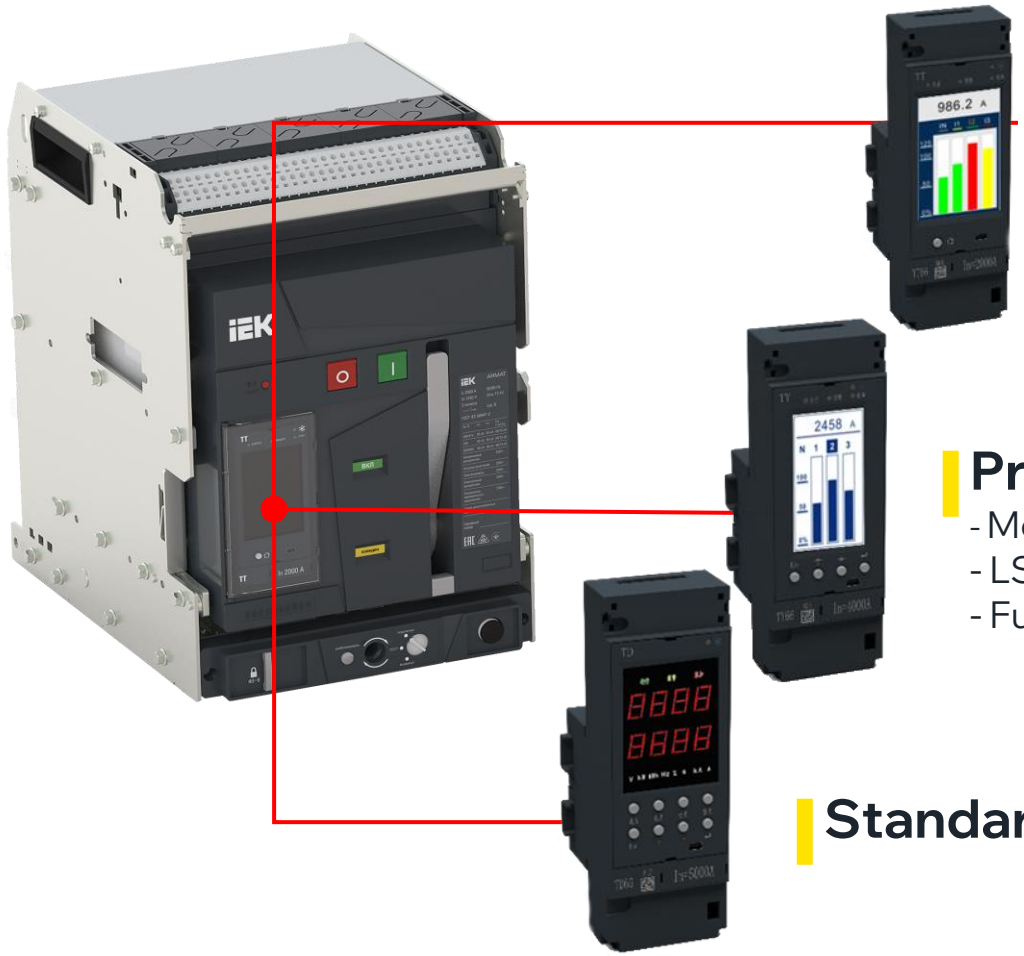
Wide range
Three types of electronic releases

Life cycle
Up to 50,000 mechanical cycles
(with maintenance)

ModBus protocol
Possibility of integration to
dispatch systems

Wide application
From house construction to industry

RELEASE TYPES



Advanced (TT)
- Modbus
- LSIG
- Colour display with touchscreen function
- Power and voltage measurement

Professional (TY)
- Modbus
- LSIG
- Functional display

Standard (TD)

630...6300 A
Rated current

55 kA...150 kA
The maximum breaking capacity

3 and 4
Quantity of poles

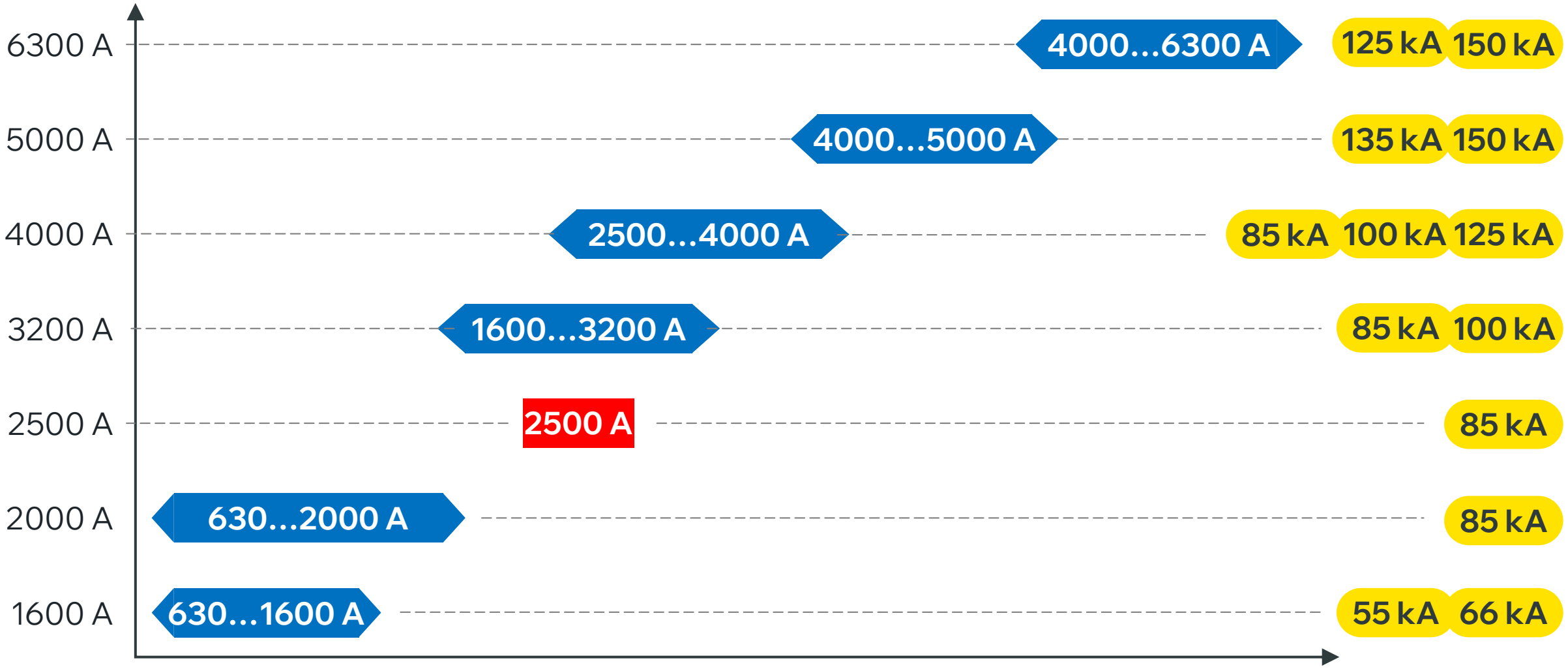
L Against overload with adjustments by current and time

S Selective

I Instant current cutoff

G Protection against phase-to-earth fault

CURRENT RANGE



CASE TYPES

Fixed

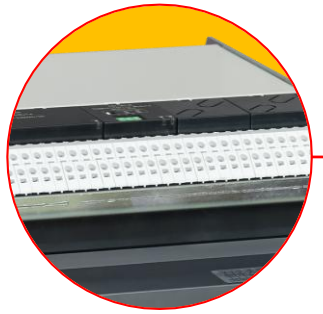
- Individual device, which is mounted directly to conduct buses. This type of design is not very convenient for maintenance and repair.

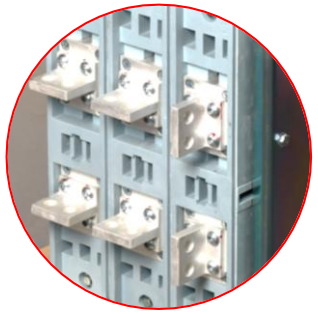
Withdrawable

- This is a combination consisting of the device itself and a basket, in which it is installed. The basket has guides and chassis for air circuit breaker rolling into and rolling out that simplifies its maintenance.

ACB FEATURES

Terminals for control circuits





Bus connection:

- Horizontal
- Vertical

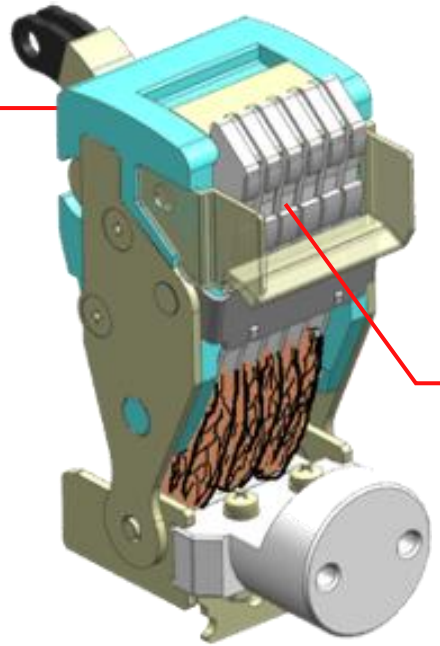
Microprocessor tripping device

- Control buttons
- ON/OFF indicator
- Spring status indicator
- Spring cocking handle

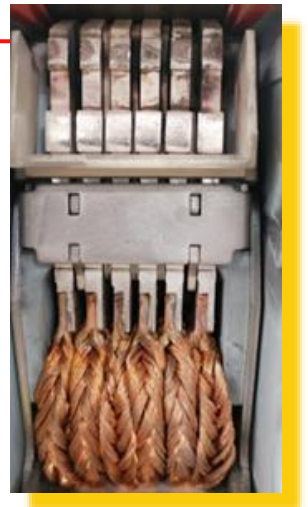
Position lock

TEST function

ARMAT ACB DESIGN FEATURES



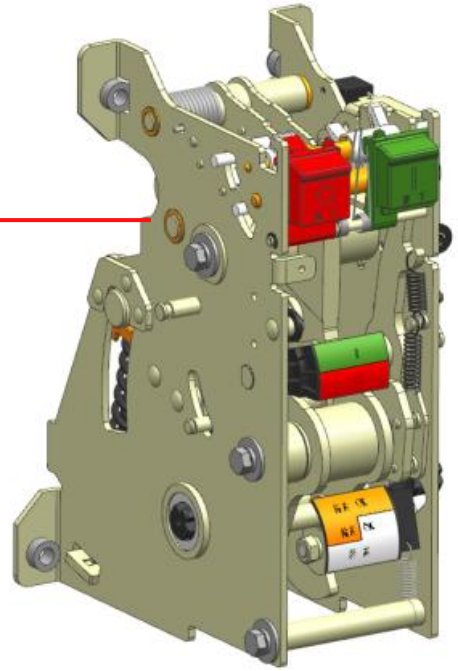
- The current path is shortened, which reduces resistance and losses;
- The cylindrical structure of the pole allows for uniform distribution of the flowing current;



Arc-extinguishing contacts use metal ceramics with a high tungsten content, which ensures the stated wear resistance;

ARMAT

ARMAT ACB DESIGN FEATURES

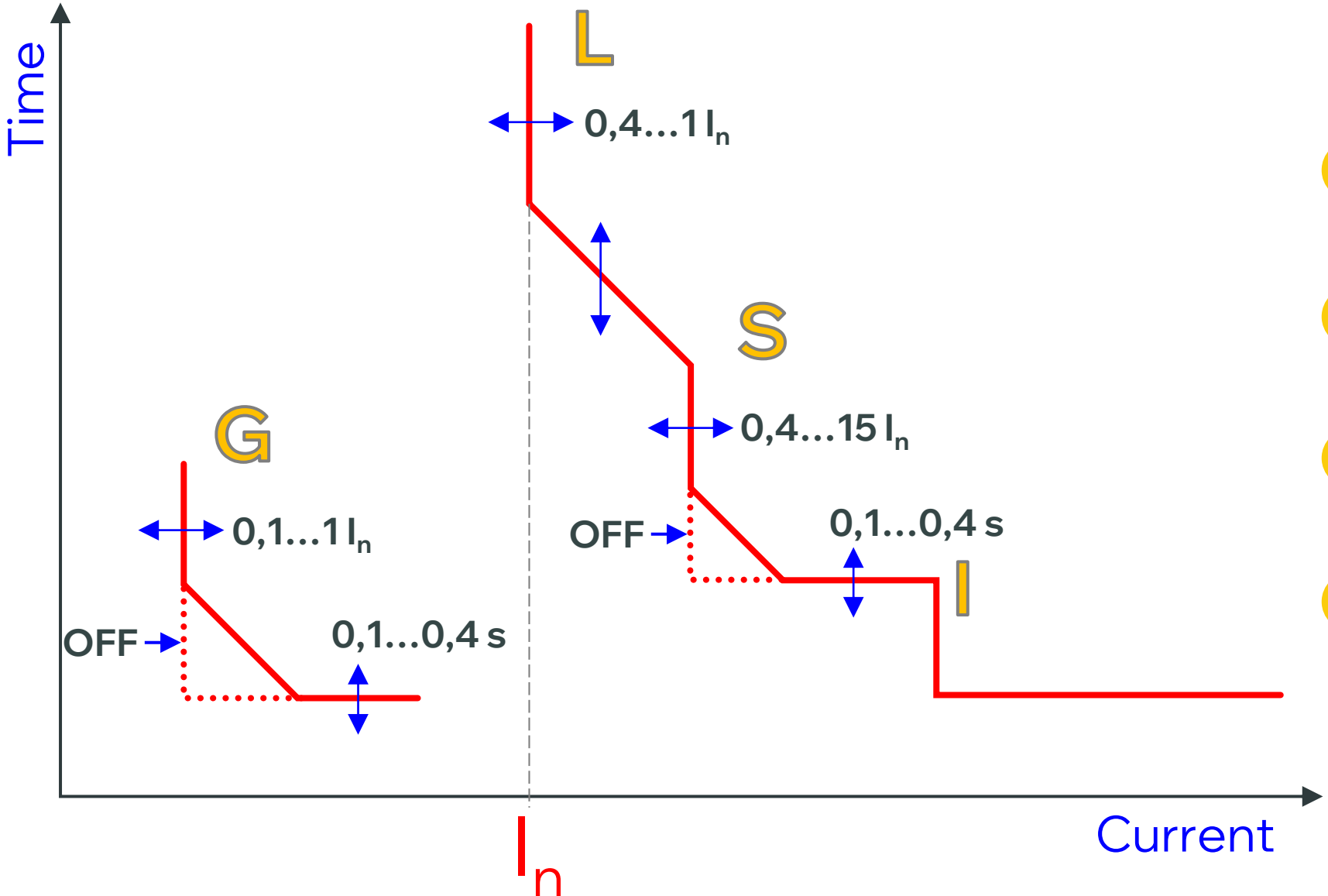


Arc-extinguishing chambers have insulated side surfaces of the chamber entry. This is done to ensure that the arc enters closer to the center of the chamber and increases the switching wear resistance.

By using two springs, the energy stored by the mechanism is increased for greater resistance of the switch to short-circuit currents.

ARMAT

ACB PROTECTION FUNCTIONS



L Overload protection with inverse long time delay**

S Short circuit protection with adjustable time delay

I Short circuit protection with instantaneous response*

G Ground fault protection

*For thermal magnetic trip units, only functions **L** and **I** are available without time delay adjustment

PRICE POSITIONING

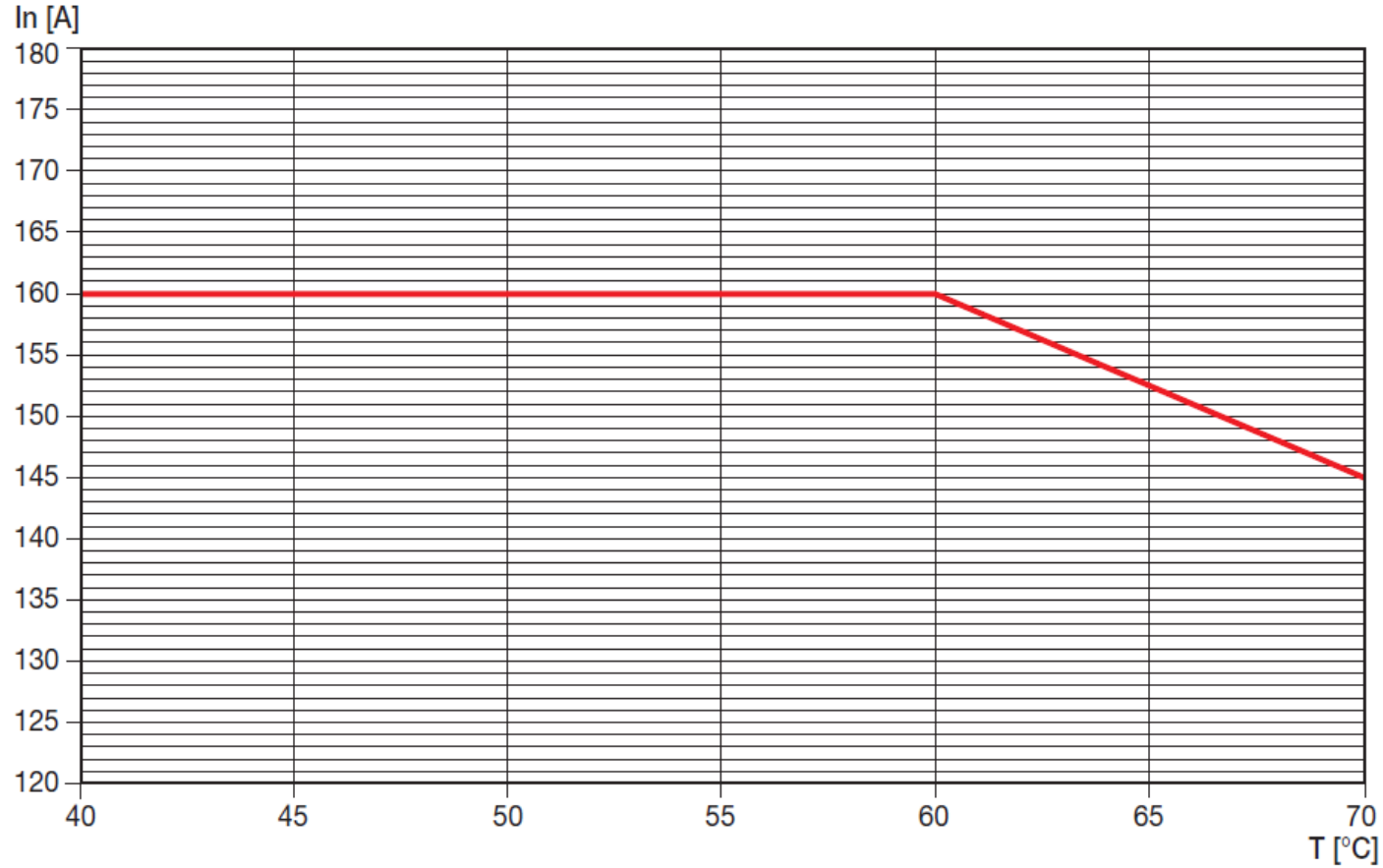
490 SKU
Wide product range

-45%
Average weighted difference from a target contender (Legrand DMX3)

SE MasterPact, **ABB** EMax, **Legrand** DMX3
Target contenders

DERATING

- The low temperature dependence coefficient of the transmitted current prevents false tripping under elevated ambient temperatures around the device and ensures stable operation of the electrical installation in emergency modes.



DERATING

Типо-размер	Номиналь-ный ток, А	Допустимый размер присоеди-няемых шин, мм	Коли-чество шин	Кратность тока I/I_n при температуре окружающей среды						
		Для вертикального исполнения		40 °C	45 °C	50 °C	55 °C	60 °C	65 °C	70 °C
B	630	60×6	1	1	1	1	1	1	1	1
	800	60×8	1	1	1	1	1	1	1	1
	1000	60×10	1	1	1	1	1	1	1	1
	1250	60×6	2	1	1	1	1	1	1	1
	1600	60×10	2	1	1	1	1	1	1	1
	2000	80×10	2	1	1	1	1	1	0,98/1960	0,94/1880
D	800	60×8	1	1	1	1	1	1	1	1
	1000	60×10	1	1	1	1	1	1	1	1
	1250	60×6	2	1	1	1	1	1	1	1
	1600	60×10	2	1	1	1	1	1	1	1
	2000	80×10	2	1	1	1	1	1	1	1
	2500	60×10	4	1	1	1	1	0,94/2350	0,88/2200	0,82/2050
F	2500	100×10	2	1	1	1	1	1	0,98/2450	0,91/2275
	3200	100×10	3	1	1	1	1	1	1	0,96/3072
	4000	120×10	3	1	1	1	0,94/3760	0,89/3560	0,83/3320	0,78/3120
G	4000	120×8	4	1	1	1	1	1	1	0,94/3760
	5000	120×10	4	1	1	1	1	0,97/4850	0,92/4600	0,86/4300
H	4000	100×10	4	1	1	1	1	1	1	1
	5000	100×8	6	1	1	1	1	1	1	1
	6300	100×10	6	1	1	1	0,97/6111	0,92/5796	0,86/5418	0,8/ 5040

IEK GROUP

ACB MASTER

PRODUCT RANGE

Icu, кА (Ics)\In, A	630	800	1000	1250	1600	2000	2500	3200	4000
65 (50)	S								
65 (55)	A								
85	D								
85						E			
85							F		
100							F		

In: from 630 to 4000A
Ue : 400/ 690 V
Icu : 65-100kA
Poles : 3
Design : Fixed and withdrawable
Ui: 1250 V (1000 V for sizes S and A)
Uimp : 12 kV
T: -25C …+70C

Icu

Parameter		S	A	D	E	F	F (100 kA)
Icu , kA	400 V	65	65	65	85	85	100
	690V	42	50	55	75	75	85
Ics , kA	400V	50	55	65	85	85	100
	690V	42	42	55	75	75	85
Icw , 1c , kA	400V	42	50	65	85	85	100
	690V	42	42	55	75	75	85

DERATING

*Operating current dependence on temperature

Circuit breaker calibration temperature: +40C

Particularly critical at sites :
- with elevated process temperatures
- with an outdated ventilation system
- with densely packed electrical equipment
- operating at the brink of overload and requiring modernization

Case	Nominal current, A	Permissible size of connecting busbar, mm	Busbar Quantity	Current multiplicity at ambient temperature I/In						
				40 °C	45 °C	50 °C	55 °C	60 °C	65 °C	70 °C
S	630	40x5	2	1	1	1	1	1	1	1
	800	40x6	2	1	1	1	1	1	1	1
	1000	40x5	3	1	1	1	1	1	1	1
A	800	50x5	2	1	1	1	1	1	1	1
	1000	40x5	3	1	1	1	1	1	1	1
	1250	40x5	4	1	1	1	1	1	1	1
	1600	50x10	2	1	1	1	1	0.98 / 1568	0.93 / 1488	0.87 / 1392
D	1600	60x10	2	1	1	1	1	1	1	1
	2000	60x10	3	1	1	1	1	1	1	1
	2500	60x10	4	1	1	1	1	0.99 / 2475	0.94 / 2350	0.89 / 2225
E	2000	60x10	3	1	1	1	1	1	1	1
	2500	100x5	4	1	1	1	1	1	1	1
	3200	100x10	4	1	1	1	1	1	1	1
F	2000	60x10	3	1	1	1	1	1	1	1
	2500	100x5	4	1	1	1	1	1	1	1
	3200	100x10	4	1	1	1	1	1	1	1
	4000	100x10	4	1	1	1	1	0.96 / 3840	0.91 / 3640	0.86 / 3440

TRIP FUNCTIONS

Trip functions			Trip type EA-35
Protective functions		Overload (L)	+
		Thermal memory	
		From short circuit with time delay (S)	+
		Thermal memory	
		From short circuit instantaneous (I)	+
		MCR1)	+
Measurement functions	Current	Phase pole	+
Diagnosis of the condition	Disengagement test by simulating a crash		+
	Monitoring of measurement and protection circuits		+
	Temperature control of the release		+
	Wear of contacts		+
	Remaining resource		+
Maintenance Management	Auxiliary Circuit Maintenance Reminder		+
	Switch Maintenance Reminder		+
Data management	10 records of the last uncouplings		+
	Minimum and maximum current		+
Power supply2)	- From an external operational power source; - When the current flowing in at least one of the phases is not less than 25% of the nominal value.		

Notes

1) The MCR (closing current release) function causes the circuit breaker to trip if the current exceeds the trip current value during the closing operation. This function is deactivated after the circuit breaker has completed closing. When the circuit breaker is in the closed position, the function is not active.

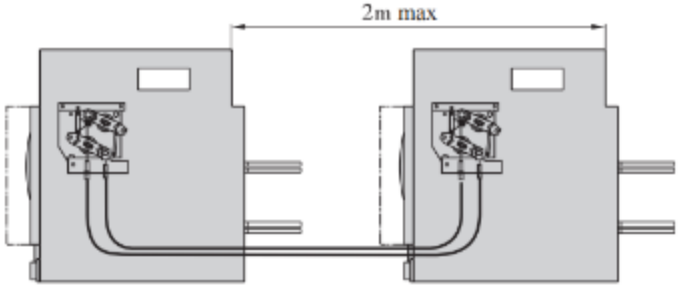
2) The operational power supply for the microprocessor trip unit is supplied to terminals 1-2 (AC 230 V). To supply the microprocessor trip unit of sizes S, A, an additional 24 V DC power supply module is required.

DELIVERY SET

Basic equipment

- Circuit breaker with electronic release
- Retractable base
- Contact position in the basket
- Connectors for connection
- Motor drive 230V AC
- Switching coil 230V AC
- Shutdown coil 230V AC
- 4 changeover contacts

Additional accessories



- Mechanical lock 3VA
- Mechanical lock 2VA

PRODUCT CODE INFO

MI-ACB10-3FA-065-0630-ACF

MI-ACB	10	-	3	F	A	-	065	-	0630	- A	C	F
ACB Master	10 – AC		3 poles	F – fixed W – retractable	A up to 1600 A D up to 2500A E up to 3200A* F up to 4000A		065 080 100		630A 800A 1000A 1250A 1600A 2000A 2500A 3200A 4000A	A – standard controller	C – factory code	F – configuration

ARMAT MCCB

MOULDED CASE CIRCUIT BREAKER

PREMIUM FUNCTIONS
By optimal price

WIDE ASSORTMENT
Devices for 3 and 4 poles
Compact standard size up to 63 A

HIGH RELIABILITY
Double break,
$I_{cu} = I_{cs}$ up to 150 кА
Minimum I_{rat} dependence from t°

AUTOMATION AND DISPATCHING
Release with support of ModBus protocol and display

PRICE POSITIONING

255 SKU
Wide assortment

-200%
Average weighted difference from a target contender (Legrand DPX3)

SE ComPact
ABB Tmax
Legrand DPX3
Target contenders

PRODUCT RANGE



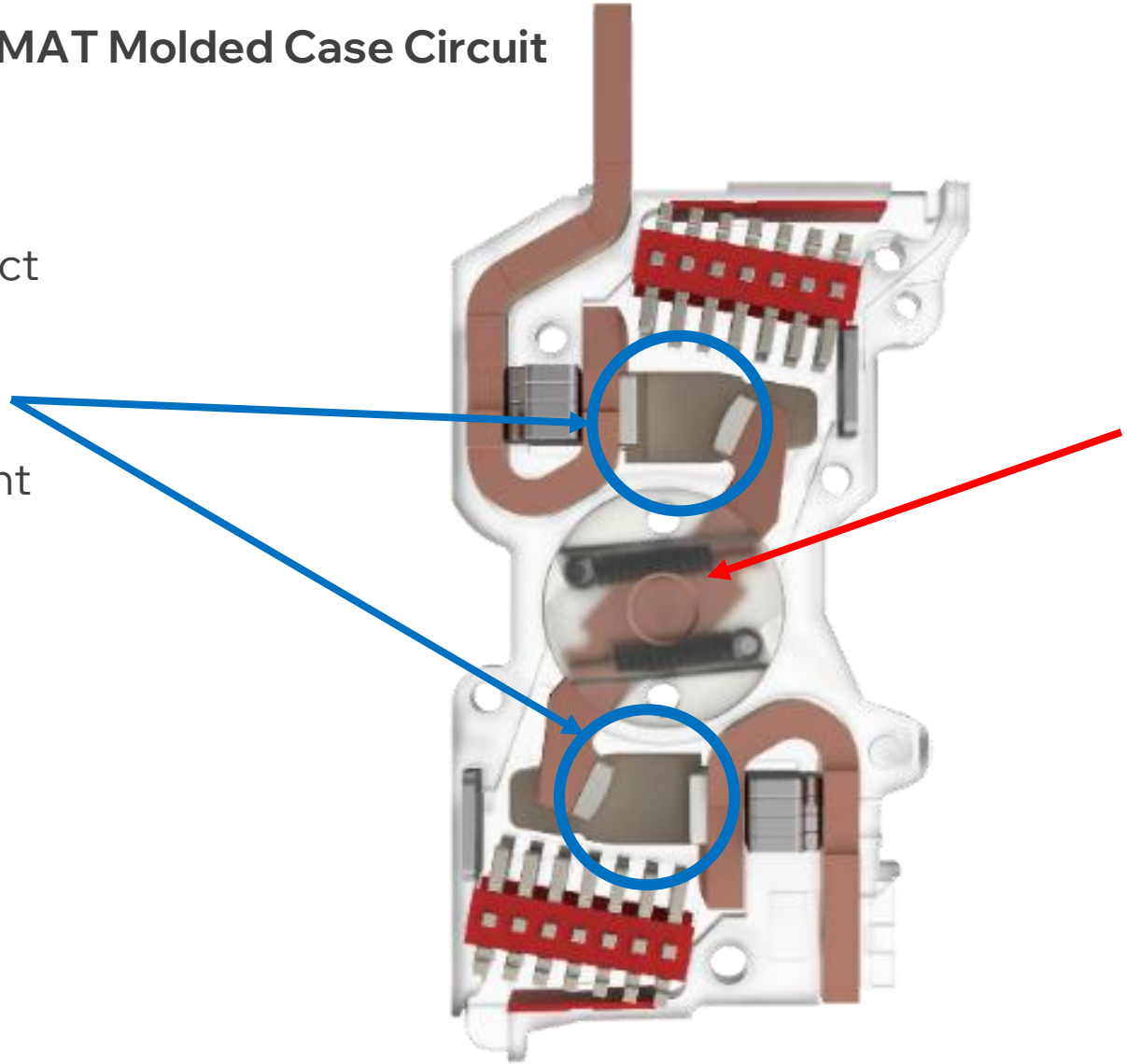


Charact.	S	A	D	G	H	I	N
I_n A	16-63	25-125	100-160	125-250	250-400	400-630	800–1600
Release	Thermal-magnetic adjustable	Thermal-magnetic adjustable Electronic standard Electronic advanced					
I_{cu} kA	35	35, 50, 85, 150	35, 50, 85, 150	50, 85, 150	50, 85, 100, 150	85, 100, 150	85, 120
Q-ty of poles, pcs	3 and 4						

ROTARY MECHANISM

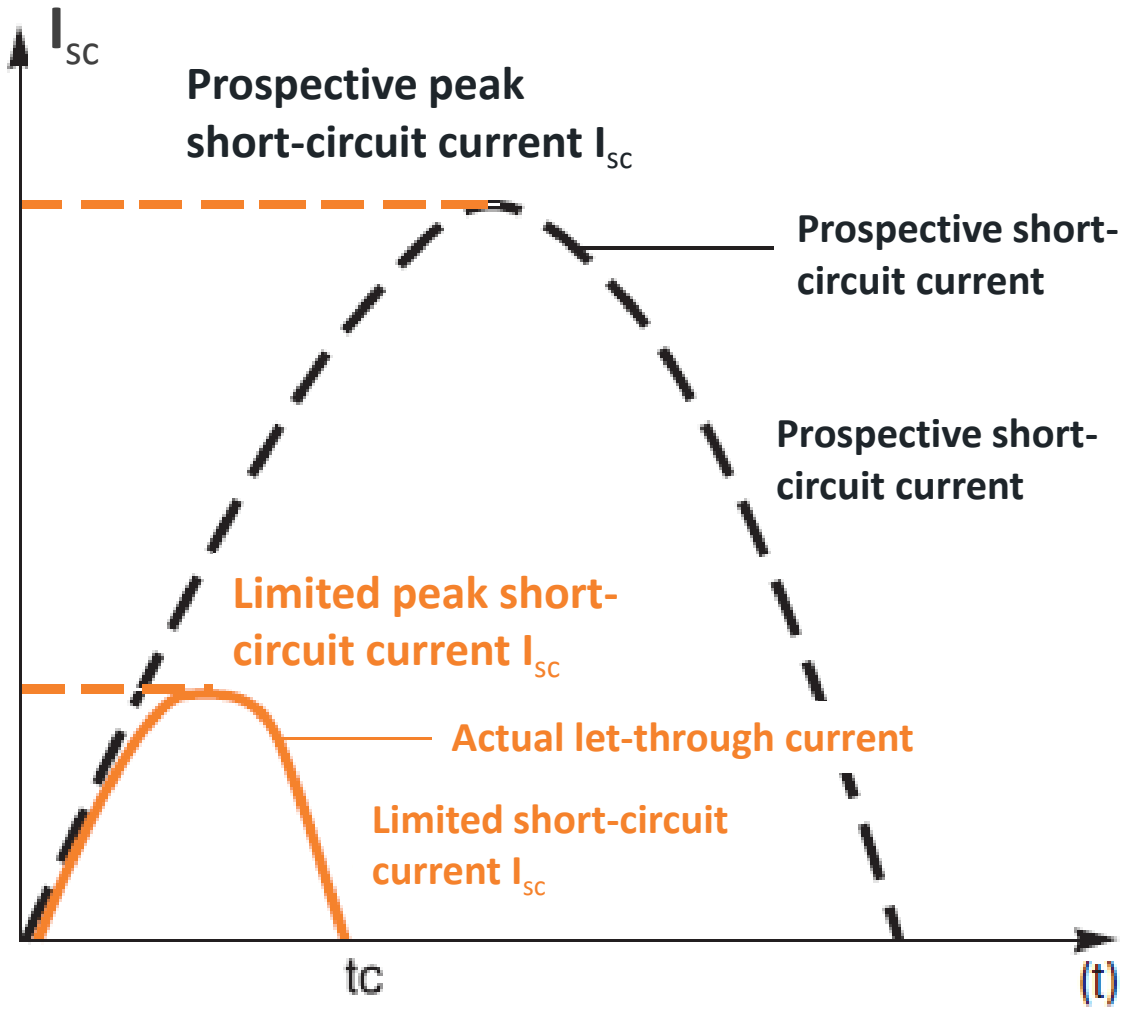
Key Advantages of ARMAT Molded Case Circuit Breakers:

- ❑ Double break contact system delivers superior current limitation and enhances equipment service life



- ❑ Rotary mechanism ensures ultra-fast short-circuit interruption with average tripping time ~55 ms (versus GOST 50030.2 and IEC 60947-2 requirements <100 ms)

CURRENT-LIMITING



Current-Limiting Circuit Breaker

Circuit breaker with an extremely short tripping time, during which the short-circuit current does not reach its peak value.

Extended Service Life of Electrical Installations

Current-limiting circuit breakers significantly reduce the adverse effects of short-circuit currents on electrical installations.

Thermal Impact

Reduced heat generation extends the service life of cable lines.

Mechanical Impact

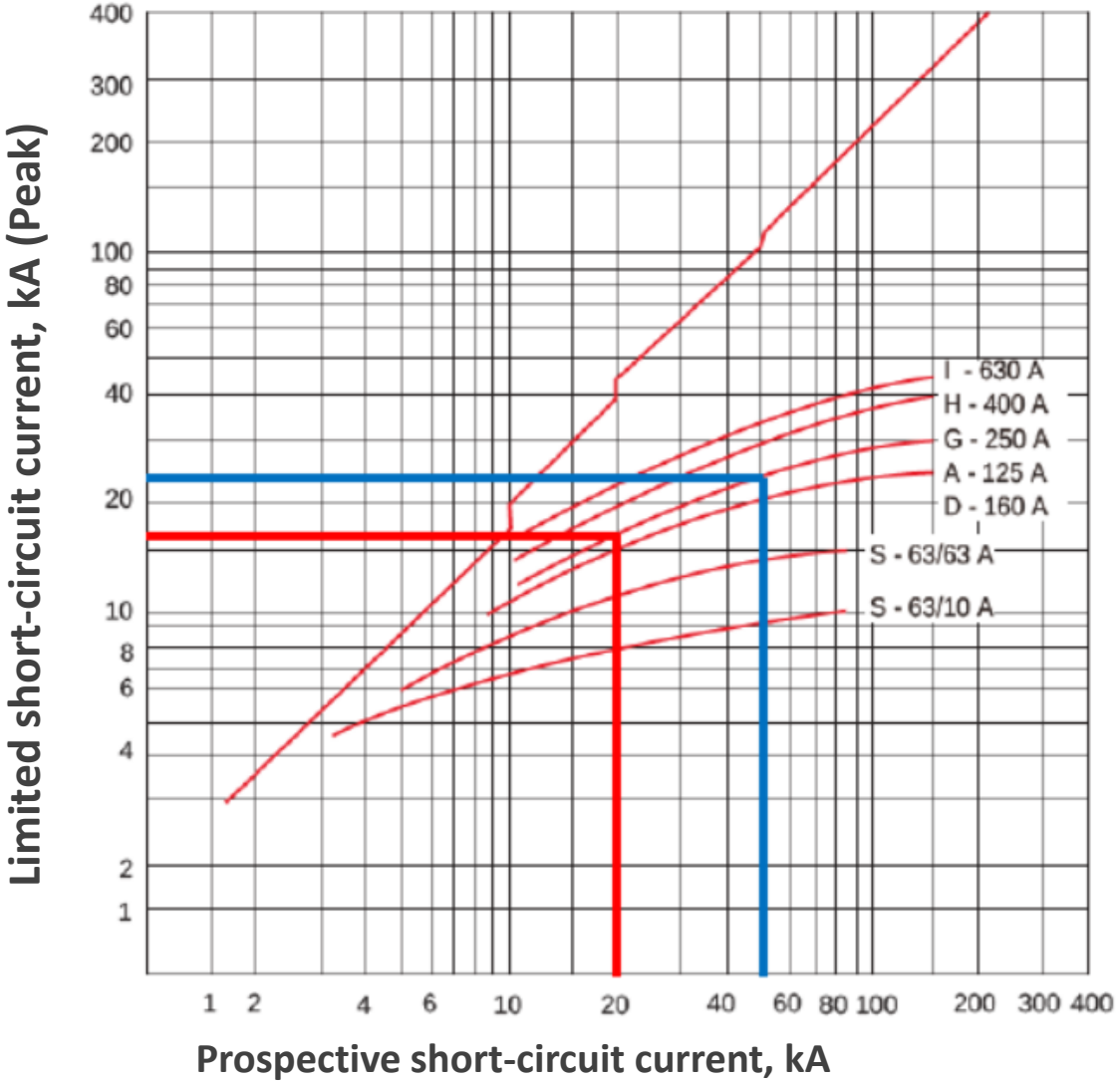
Reduction of electrodynamic forces minimizes the risk of deformation or damage to contact connections and busbars.

Electromagnetic Impact

Mitigation of interference affecting nearby measuring instruments.

CURRENT-LIMITING CALCULATION

AC400B ARMAT MCCB current limitation curve for short-circuit, kA (Peak)



ARMAT – G case - 250A

Example #1

Prospective peak short-circuit current I= **20 kA**
Limited short-circuit current = **16 kA**

Example #2

Prospective peak short-circuit current I = **50 kA**
Limited short-circuit current = **24 kA**

IEK GROUP

MCCB MASTER

VA88 MASTER

Coming soon!

	VA88-31	VA88-32	VA88-35	VA88-37	VA88-39	VA88-40	VA88-43
I_n A	16 - 63	16 - 125	100 - 250	250 - 400	400 - 630	400 - 800	1000-1600
Release	Thermomagnetic	Thermomagnetic Electronic	Thermomagnetic Electronic	Thermomagnetic	Electronic	Thermomagnetic Electronic	Electronic
I_{cu} kA	25	25	35	35	35	35	70

VA88 MASTER RELEASES

THERMOMAGNETIC
Fixed settings

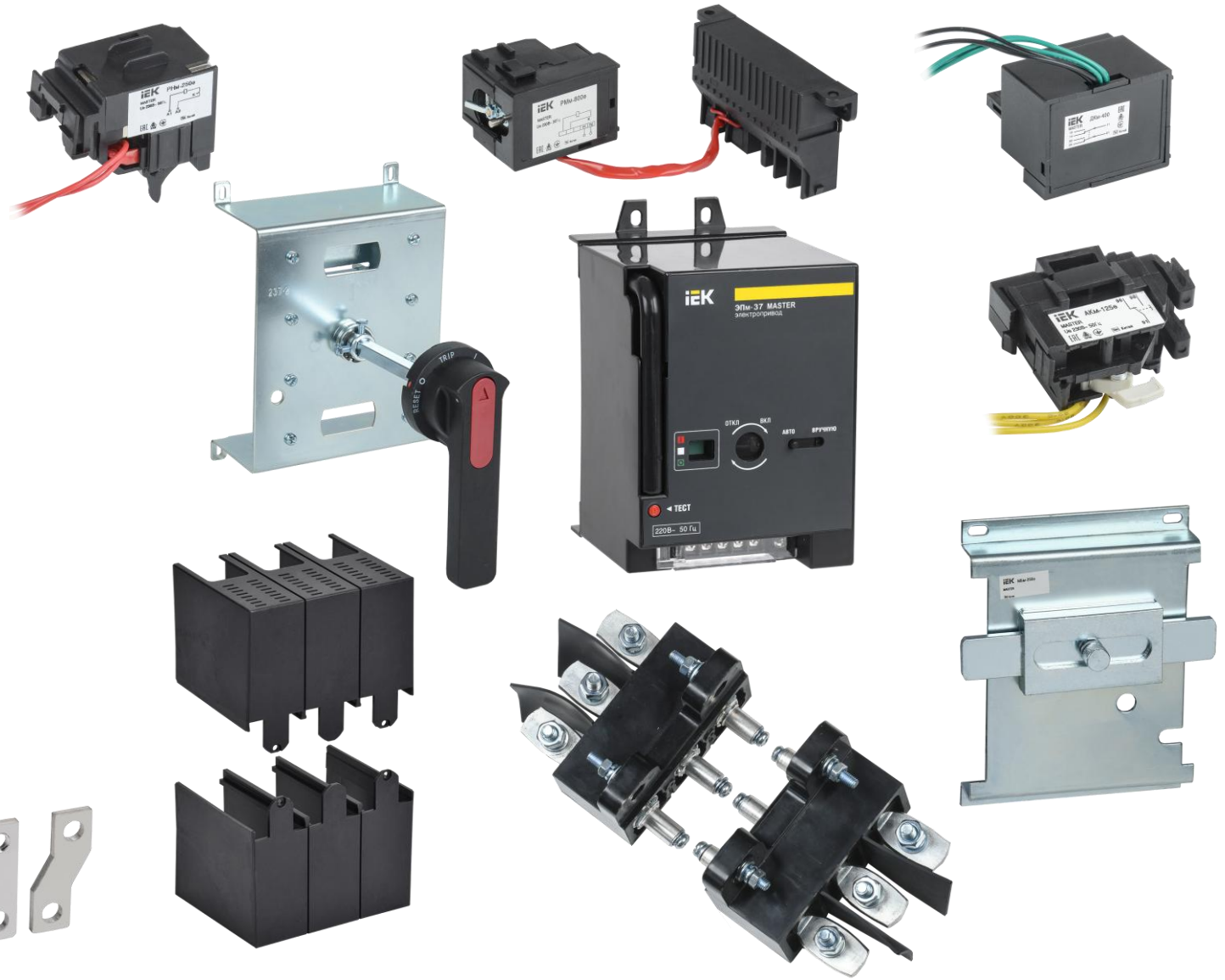
- VA88-31
- VA88-32
- VA88-33
- VA88-37
- VA88-40

ELECTRONIC
Adjustable setpoints

- VA88-32
- VA88-35
- VA88-39
- VA88-40
- VA88-43

VA88 MASTER ACCESSORIES

- Shunt release **RNm**
- Undervoltage release **RMm**
- Additional contact **DKm**
- Emergency contact **AKm**
- Rotary hand drive **PRPm**
- Electric drive **EPm**
- Plug-in mounting **PMm**
- Mechanical lock **MBm**
- Tips **Nm**
- Expanders **RVm**
- Terminal covers **KKm**



ARMAT CONTACTORS

KMI-A CONTACTORS

2+ million cycles
Electrical wear resistance

15+ million cycles
Mechanical wear resistance

Up to 690 V~
Rated operating voltage, Ue

6A...95A
Rated current

24 / 36 / 48 / 110 / 230 / 400
Voltage of control coils, V, AC

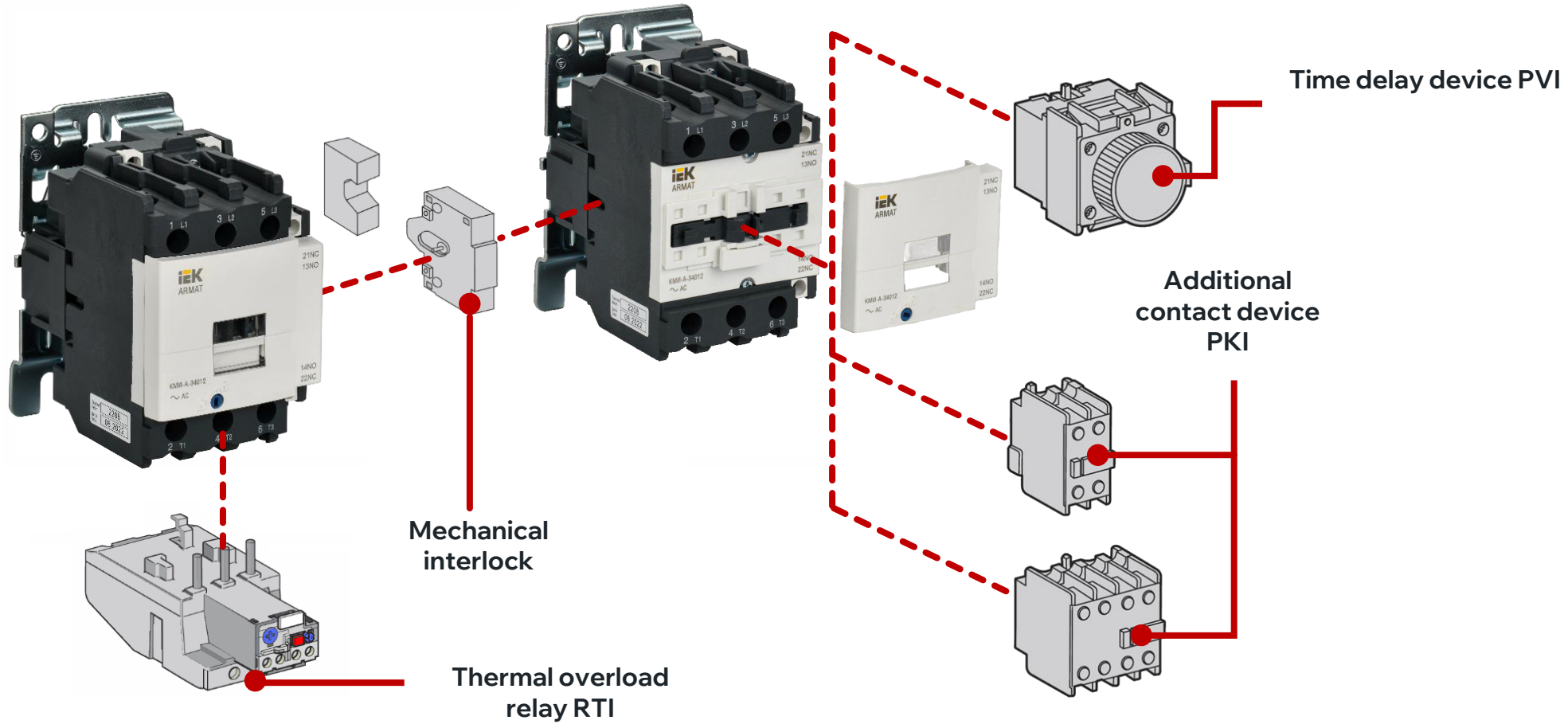
5 years
Warranty

15 years
Life time

KMI-A RANGE

Size		1	2	3	4
Current, A		6 - 18	25 - 32	40 - 50	65 - 95
Power, up to, кWt	230 V	4	7,5	15	25
	400 V	7,5	15	22	45
	600 V	10	18,5	37	45
Voltage of control coils, V, AC		**24 36 48 110 230 400**			

KMI-A ACCESSORIES



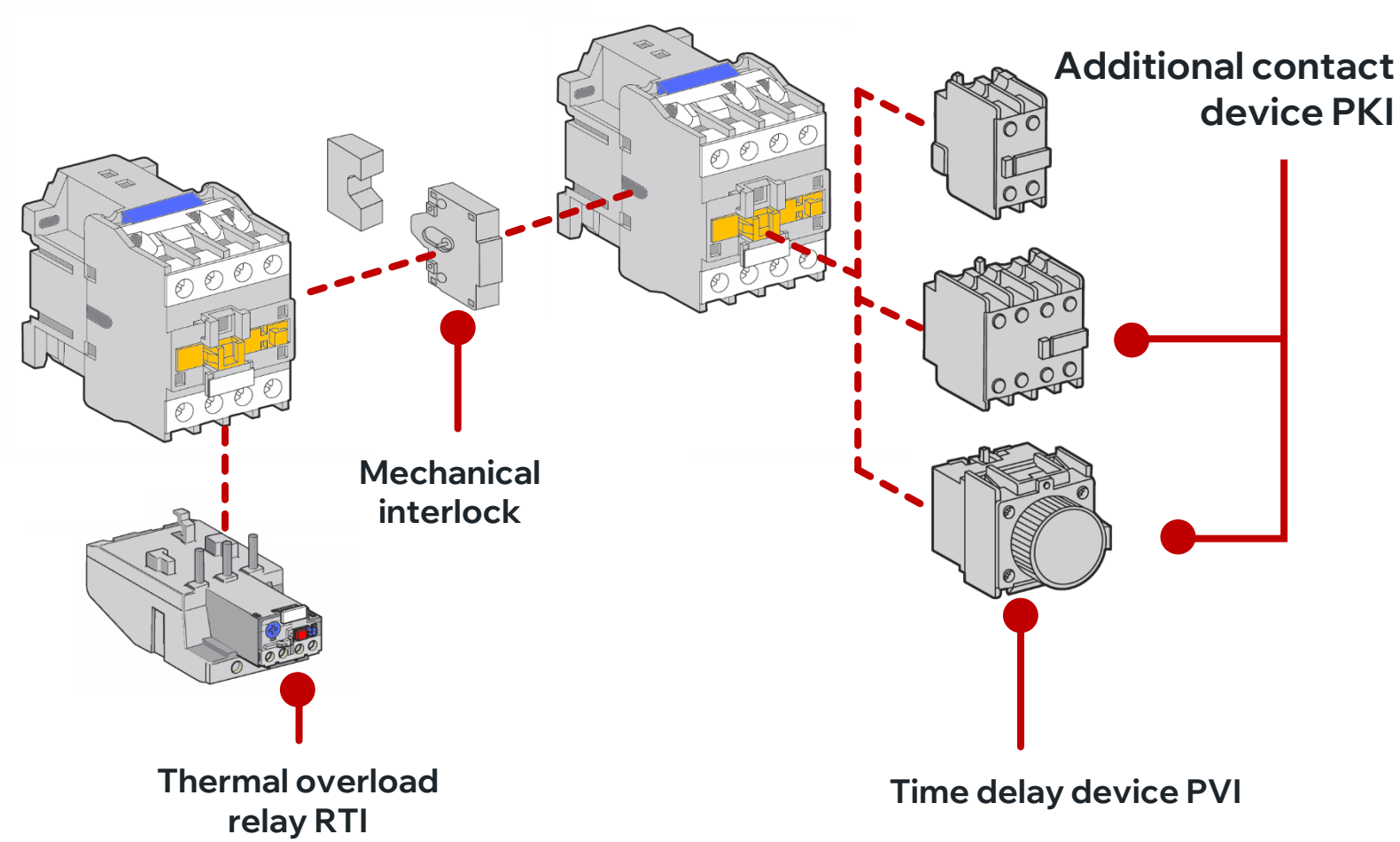
IEK GROUP

KARAT CONTACTORS

KMI CONTACTORS

Size		1	2	3	4
Current, A		6 - 18	25 - 32	40 - 50	65 - 95
Power, up to, кWt	230 V	4	7,5	15	25
	400 V	7,5	15	22	45
	600 V	10	18,5	33	45
Voltage of control coils, V, AC		**24 36 48 110 230 400**			

KMI ACCESSORIES



KTI CONTACTORS

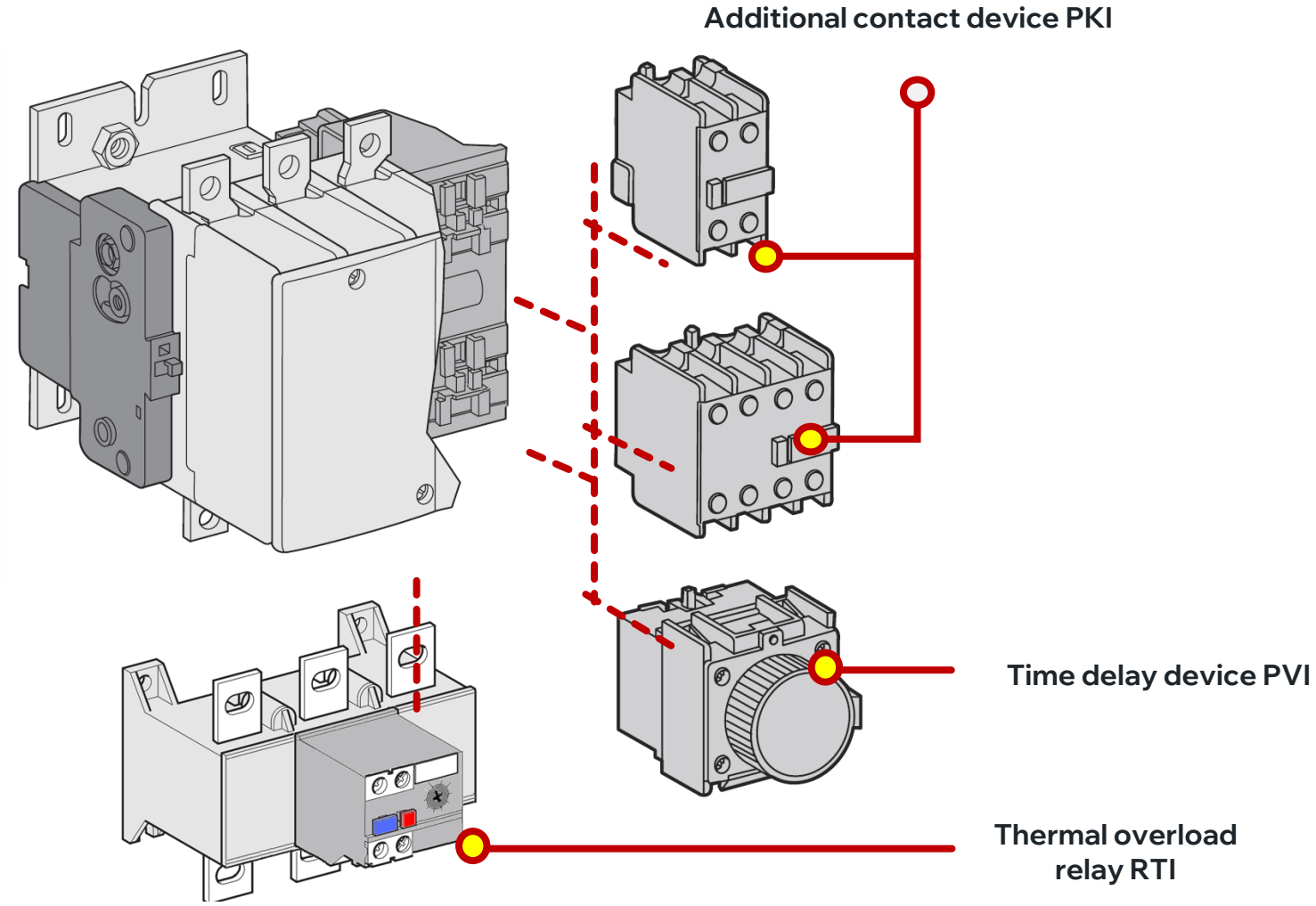
size 5

size 6

size 7

115 A — 1000 A

KTI ACCESSORIES



ARMAT MOTOR PROTECTION

ARMAT MPCB MAIN FEATURES

- Thermal release setting range: 0.1 A – 45 A
- Operating breaking capacity up to 100kA
- 2 sizes
- Electromagnetic type
- Temperature compensation
- Wide range of accessories

MPCB PURPOSE

ARMAT Motor Protection Circuit Breakers designed to control electric drives with three-phase asynchronous electric motors and to protect against overload, short circuits and open-phase operating modes)

MOST COMMON FAILURE REASONS

Most cases of emergency electric motor failures are caused by damage to the winding due to its overheating: destruction of the insulation causes a subsequent interturn short circuit, and the motor fails.

ARMAT MPCB DERATING

The low coefficient of dependence of the transmitted current on temperature allows you to avoid false alarms at elevated temperatures around the device and ensure stable operation of the electrical installation in emergency modes

In , A	Current value at ambient temperature								
	-30˚C	-20˚C	-10˚C	0˚C	10˚C	20˚C	30˚C	40˚C	50˚C
	When installed open, I_e, A								
0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
1.0	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
4.0	4	4	4	4	4	4	4	4	4
6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
10	10	10	10	10	10	10	10	10	10
16	16	16	16	16	16	16	16	16	16
20	20	20	20	20	20	20	20	20	20
25	25	25	25	25	25	25	25	25	25
32	32	32	32	32	32	32	32	32	32
45	45	45	45	45	45	45	45	45	45

ARMAT MPCB ACCESSORIES

- Extended handle
- IP65 shell
- Shunt release
- Undervoltage release with early tripping
- Undervoltage release
- Additional transverse/lateral contact
- Additional emergency contact transverse/lateral

IEK GROUP

MASTER MOTOR PROTECTION

MASTER MPCB


1L1
3L2
5L3
6-10A
П/ST OP
ПК/ST ART
MASTER
IEK
ПРК32-10
PRK32-10
6-10 A
2T1
4T2
6T3


IEK
Пускатель ручной
кнопочный
ПРК32
5 лет
гарантии
MASTER

MODULAR EQUIPMENT

MODULAR EQUIPMENT

MCB

RCCB

RCBO

STRENGTH CONSTRUCTION

HIGH TRIPPING SPEED

VERSATILITY

RESOURCE 10,000 CYCLES

IMPROVED ARC CHUTE

STANDART COMPLIENCE

10 YEARS WARRANTY

Miniature Circuit Breaker (MCB)

0,5...125 A
Nominal current

B,C,D,Z,L,K
Mechanical wear resistance

1...4
Poles

-60...+70 °C
Operating temperature range

6 / 10 / 15 kA
Breaking capacity

10 years
Warranty

15 years
Life time

ADVANTAGES

Safety shutters

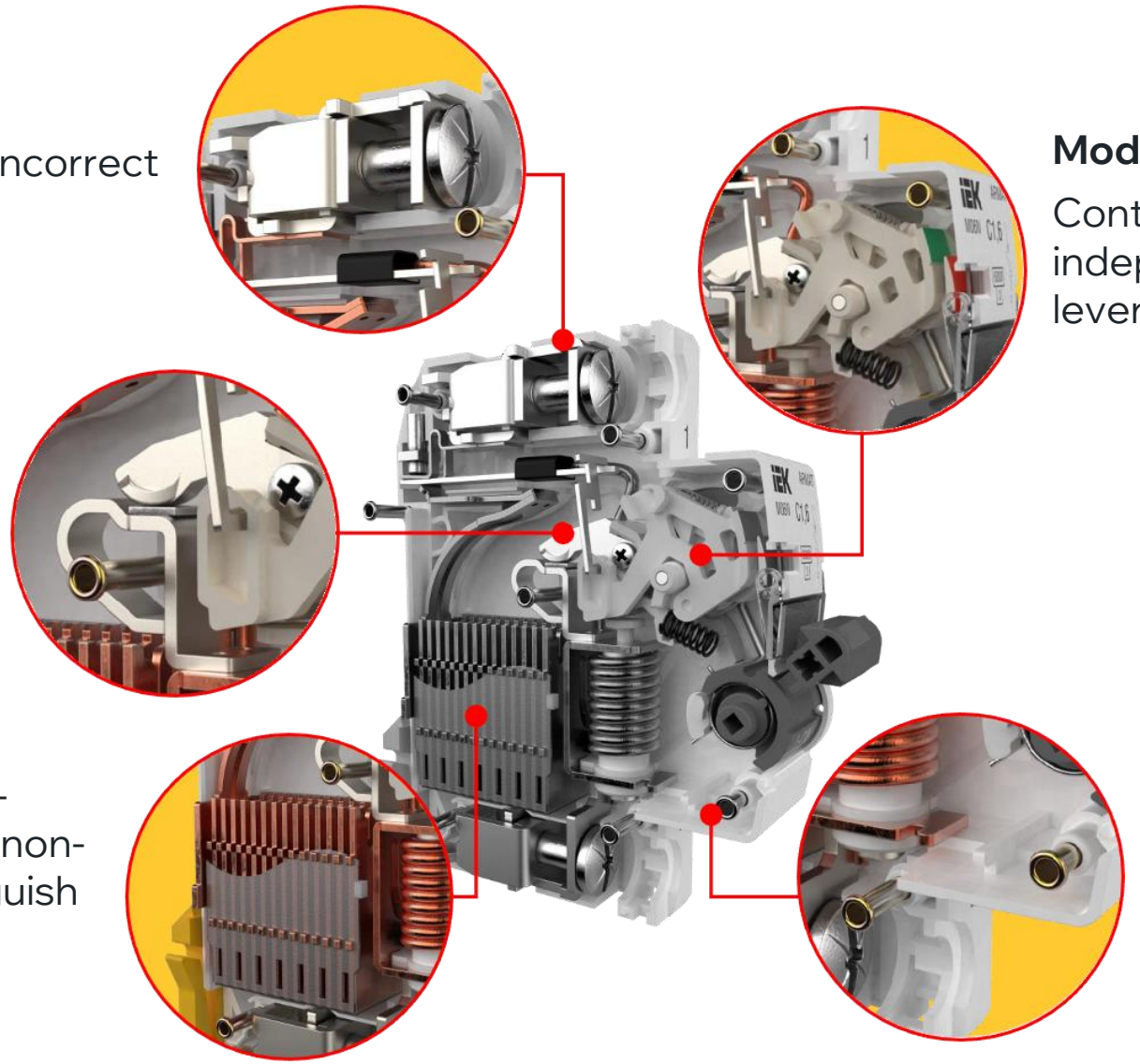
Protection against incorrect connection

Soldering contact

Made of silver-based composite material AgC4

Arc suppression chamber

14 copper-plated plates, wedge-shaped cut-out, gas-generating non-stick screens - effectively extinguish electric arcs

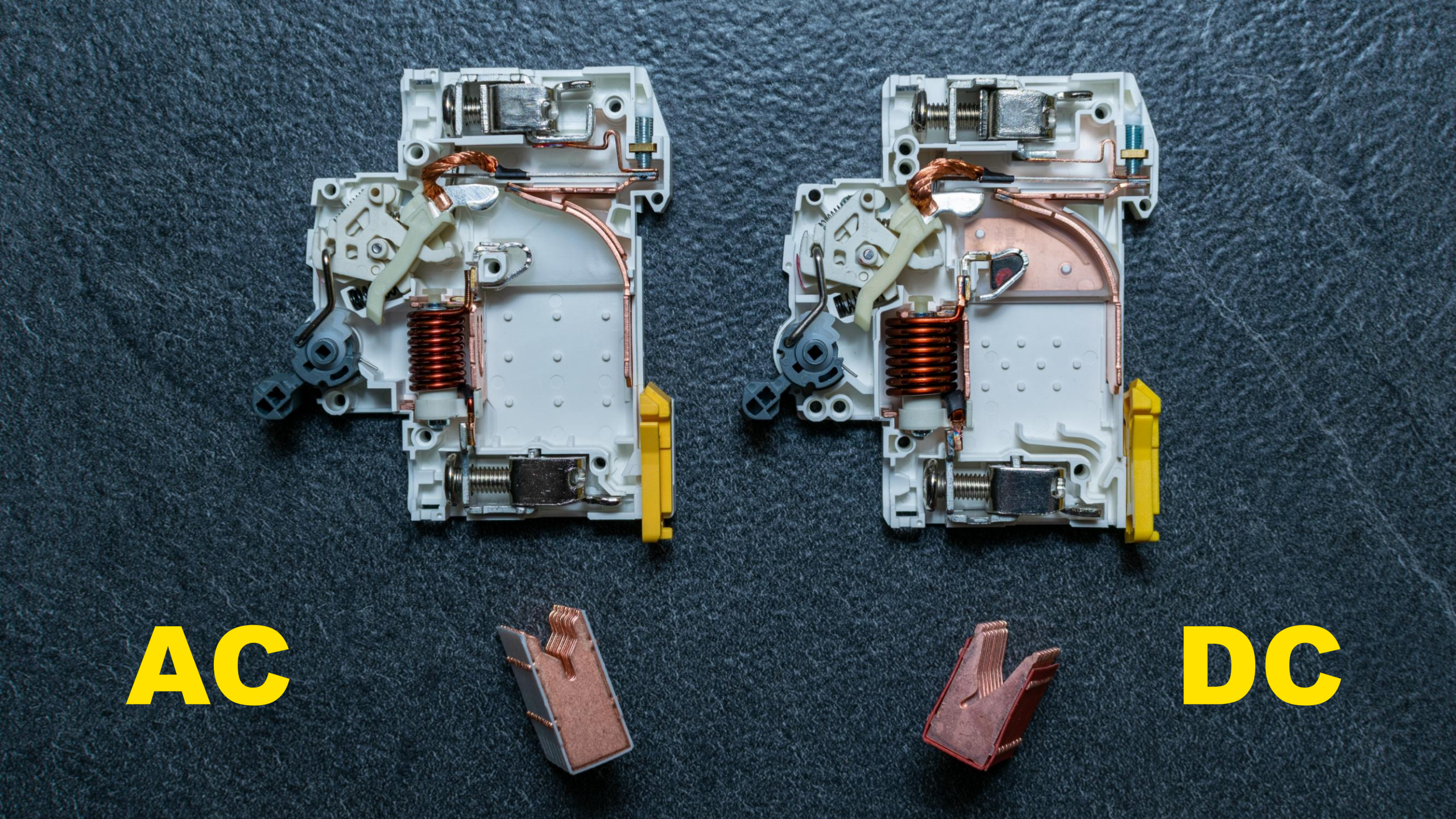


Modern release mechanism

Contact closure speed is independent of the cocking lever movement speed

Robust housing

8 rivets for high terminal torque


AC
DC

AUXILIARIES CONNECTION

Installation order

Status contact

Alarm contact

Switch contact

Minimal voltage release

Minimal voltage release with delay

Releases:
- Max voltage.
- Shunt trip
- Shunt trip with indication

M06N
M10N
B06S
M06N DC

RESIDUAL CURRENT CIRCUIT BREAKER (RCCB)

25...100 A
Nominal current

10...300 mA
Residual current

2/4
Number of poles

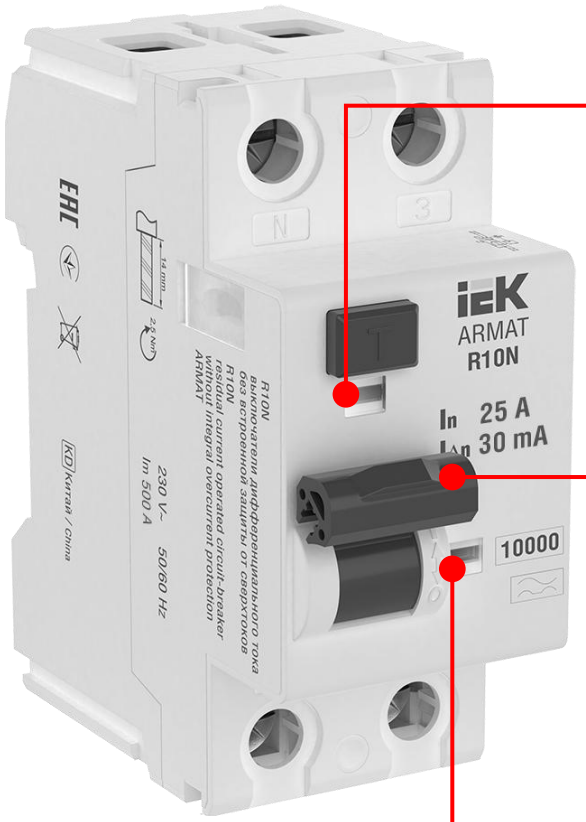
-25...+40 °C
Operating temperature range

AC, A, AC-S, A-S
Type of protection

10 000 A
Breaking capacity

Electromechanical
Type

RCCB ADVANTAGES



Main contacts status indicator

Shows the exact status of the main contacts, regardless of the position of the cocking handle (if it is locked).

Release mechanism

Is a device of independent action, which allows it to work even when the handle is locked.

Visual indication

Residual current trips

RCBO

6...32 A
Nominal current

B, C
Time/current characteristic

10/30 mA
Residual current

Electronic
Type

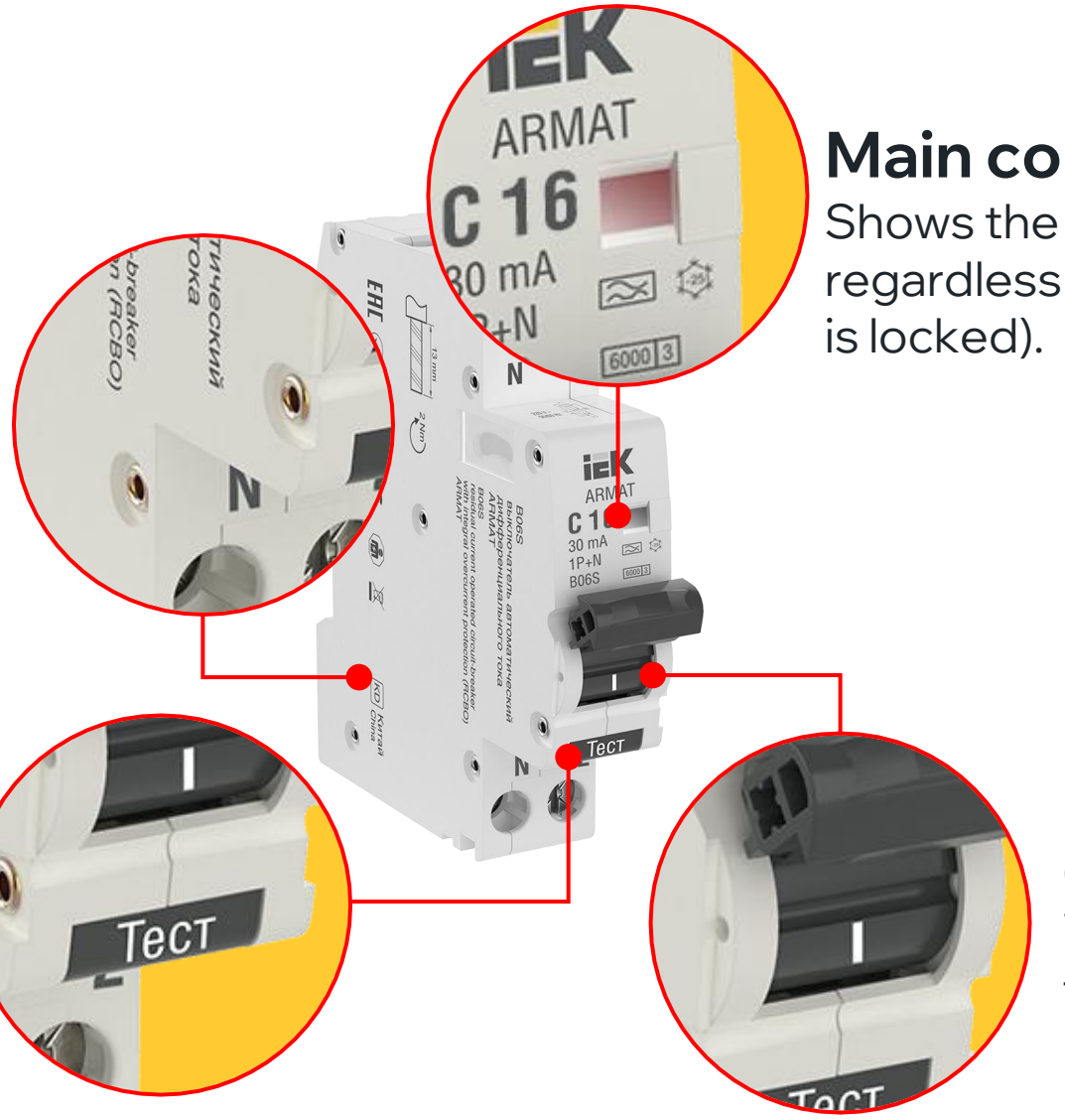
1P+N (18 mm)
Number of poles

AC, A
Type of protection

RCBO ADVANTAGES

Robust housing

8 rivets for high terminal tightening torque.



Main contacts status indicator

Shows the exact status of the main contacts, regardless of the position of the cocking handle (if it is locked).

TEST button

To check the performance of the RCBO.

Manual control lock

Can be locked in extreme positions. When enabled, this will not block the free trip mechanism.

SWITCH-DISCONNECTOR

16...125 A
Nominal current

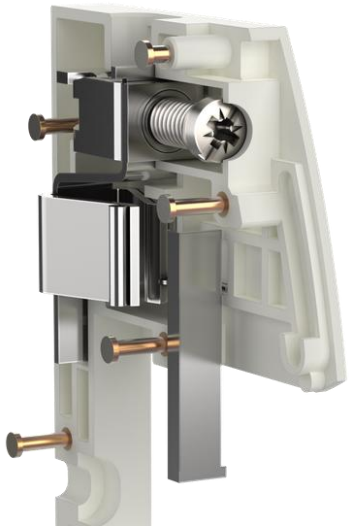
1...4 p
Number of poles

400 V
Rated operating voltage AC

48 V
Rated operating voltage DC

AC-22A
Application category

HOT SWAP MODULE



HANDLE AND TERMINAL LOCK

OTHER ACCESSORIES

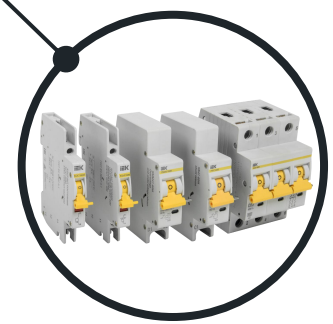
IEK GROUP

KARAT MODULAR EQUIPMENT

KARAT MODULAR EQUIPMENT RANGE

KARAT

Contactors



MCB accessories

RCBO 6kA

RCBO 4,5kA

MCB 6kA

MCB 4,5kA

RCCB

KARAT MCB

VA47-29

I_n	0,5 … 63 A
I_{cu}	4 500 A
Poles	1, 2, 3, 4
Characteristic	B, C, D

Resource

20 000

6 000

VA47-60M

I_n	1 … 63 A
I_{cu}	6 000 A
Poles	1, 2, 3, 4
Characteristic	B, C, D

Resource

20 000

8 000

KARAT MCB ACCESSORIES

- Status contact
- Emergency contact
- Shunt release
- Release min. and max. voltage

VA47-29 | **VA47-60M**

KARAT RCBO AD

AD12 AD14

I_n	6 … 63 A
$I_{\Delta n}$	10 … 300 mA
I_{cu}	4 500 A
Poles	2, 4
Type	AC
Characteristic	B, C

AD12M

I_n	10 … 63 A
$I_{\Delta n}$	30 mA
I_{cu}	4 500 A
Poles	2
Type	A
Characteristic	B, C

KARAT RCBO AVDT

AVDT32

I_n	6 … 63 A
$I_{\Delta n}$	10 … 300 mA
I_{cu}	6 000 A
Poles	1+N
Type	A
Characteristic	B, C

AVDT32EM

I_n	6 … 63 A
$I_{\Delta n}$	10 … 300 mA
I_{cu}	6 000 A
Poles	2P
Type	A
Characteristic	B, C

AVDT34

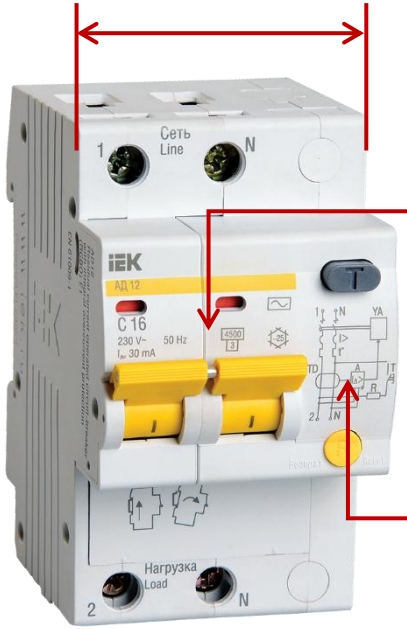
I_n	6 … 63 A
$I_{\Delta n}$	100, 300 mA
I_{cu}	6 000 A
Poles	3+N
Type	A
Characteristic	C

AVDT32ML

I_n	6 … 32 A
$I_{\Delta n}$	10 … 100 mA
I_{cu}	6 000 A
Poles	1+N
Type	AC, A
Characteristic	B, C

COMPARATION OF AD AND AVDT

54 mm
3 modules



MCB VA47-29

Electronic residual current protection module

AD12

36 mm
2 modules

AVDT32
AVDT32EM

18 mm
1 module

AVDT32ML

KARAT RCCB VD

VD3-63 type AC

I_n	16 … 100 A
$I_{\Delta n}$	10 … 300 mA
I_{cu}	6 000 A
P	2, 4
Type	AC

VD3-63 type A

I_n	16 … 63 A
$I_{\Delta n}$	10 … 300 mA
I_{cu}	6 000 A
P	2, 4
Type	A

VD3-63S

I_n	25 … 80 A
$I_{\Delta n}$	100, 300 mA
I_{cu}	6 000 A
P	2, 4
Type	AC

KARAT KM MODULAR CONTACTOR

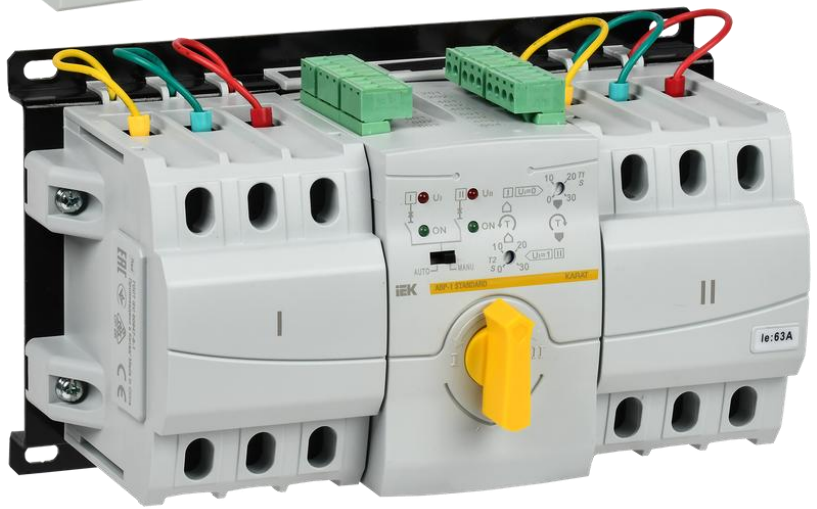
20...63 A
Rated current

230 and 400 V
Rated voltage

Automatic/Manual
Control

Additional contacts
Possibility to install additional contacts (1NO+1NC, 2NO)

OTHER ACCESSORIES



ARMAT PROJECT BENEFITS

Requirements:

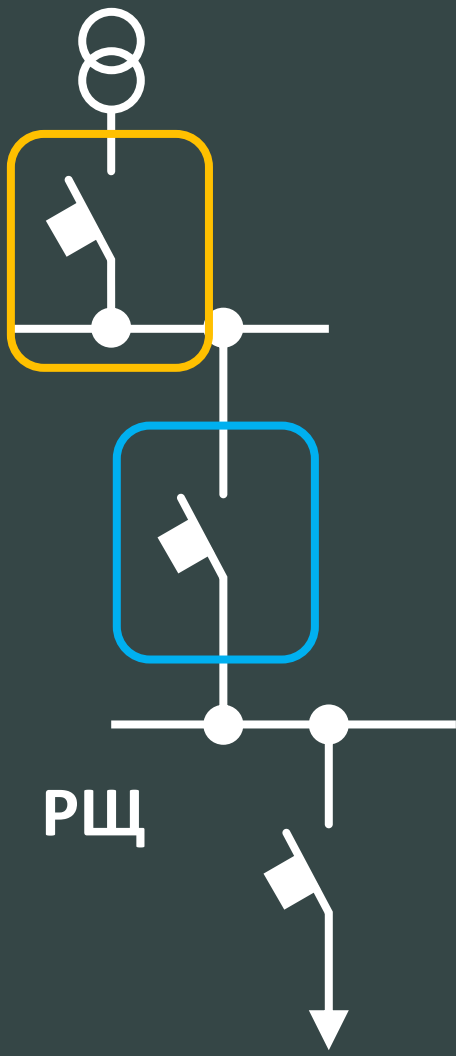
- ❑ The customer wants high-quality equipment;
- ❑ The customer has previously worked with top-brand equipment ABB, SE, Siemens;
- ❑ IEK and partners have access to the customer's technical service;

What the project participant gets:

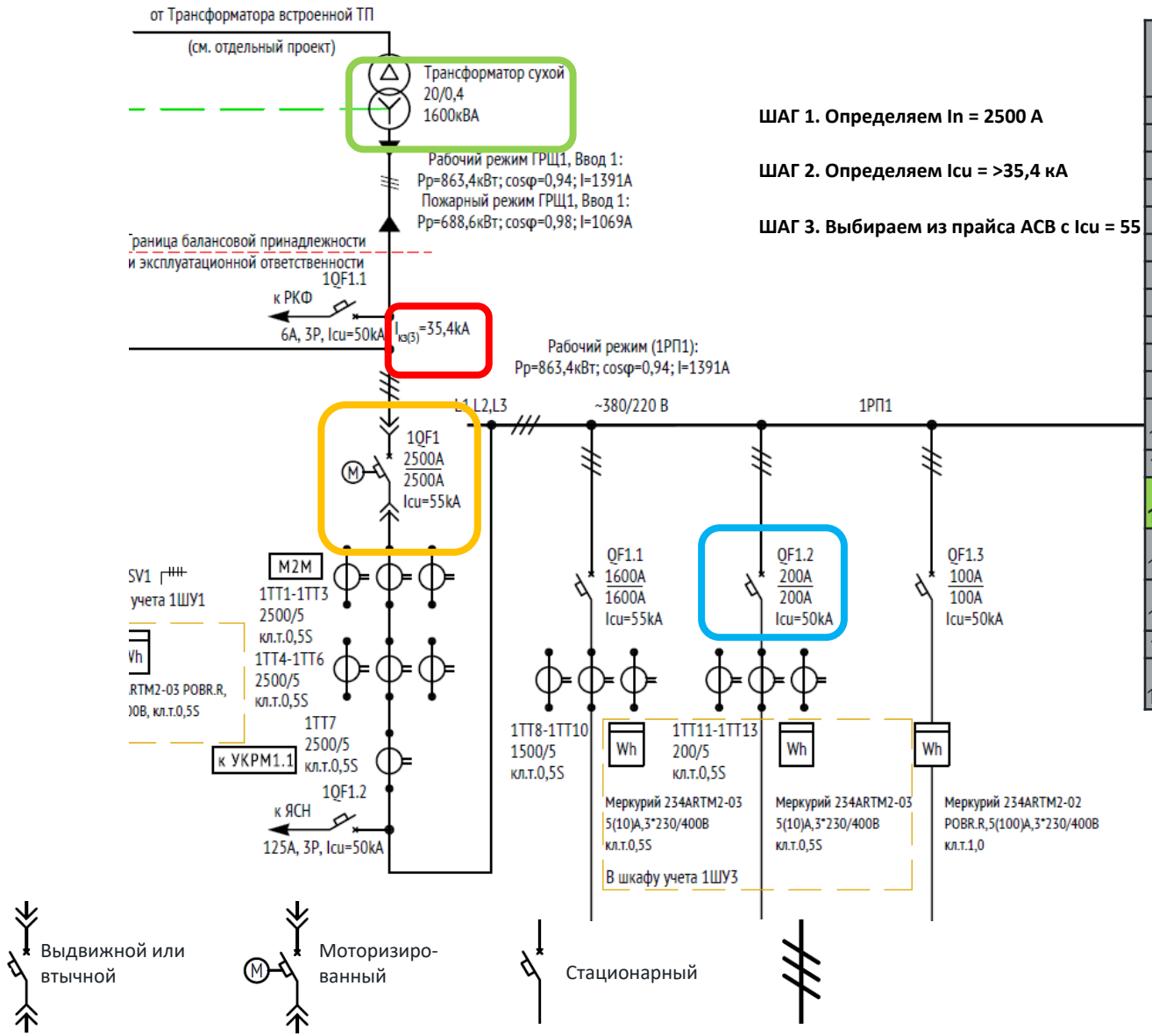
- ❑ Panel builder will be able to protect the budget due to the high technical characteristics of the equipment;
- ❑ IEK will help the panel builder to justify the high cost of the equipment due to the correct positioning of the equipment;
- ❑ The chief power engineer of the customer gets reliable equipment and does not bear operating costs in the future;
- ❑ Panel builder gets protection for the project by IEK project policy;
- ❑ Panel builder profitably acquires equipment for the project due to the possibility of forming special codes for the equipment.

SINGLE LINE DIAGRAM

ГРЩ



РЩ



ШАГ 1. Определяем In = 2500 А

ШАГ 2. Определяем Icu = >35,4 кА

ШАГ 3. Выбираем из прайса АСВ с Icu = 55

Sr, кВа	Uk,%	Ir(Транс), А	Ib(Шина), А	Ik	In аппарата, А	Уставка
x 63	4	91	91	2,2	100	0,92
1 x 100	4	144	144	3,6	160	0,91
1 x 125	4	180	180	4,5	200	0,73
1 x 160	4	231	231	5,7	250	0,93
1 x 200	4	289	289	7,2	320	0,91
1 x 250	4	361	361	8,9	400	0,91
1 x 315	4	455	455	11,2	630	0,73
1 x 400	4	577	577	14,2	630	0,92
1 x 500	4	722	722	17,7	800	0,91
1 x 630	4	909	909	22,3	1000	0,91
1 x 800	5	1155	1155	22,6	1250	0,93
1 x 1000	5	1443	1443	28,1	1600	0,91
1 x 1250	5	1804	1804	34,9	2000	0,91
1 x 1600	**6,25**	**2309**	**2309**	**35,7**	**2500**	0,93
1 x 2000	6,25	2887	2887	44,3	3200	0,91
1 x 2500	6,25	3608	3608	54,8	4000	0,91
1 x 3125	6,25	4510	4510	67,7	5000	0,91
1 x 4000	6,25	5774	5774	92,3	6300	0,92

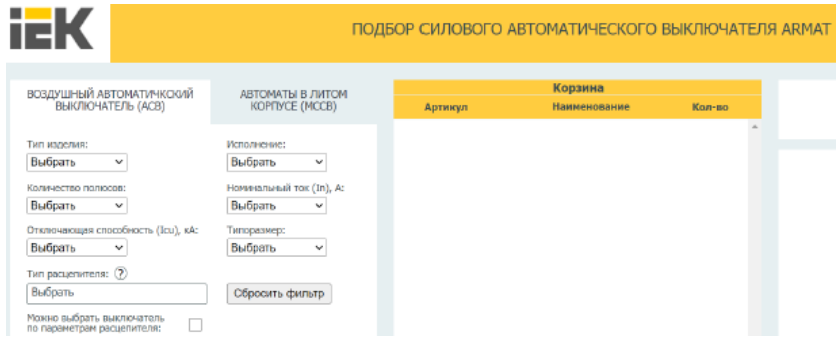
WHY Icu=35KA IS OFTEN MORE THAN SUFFICIENT?

Transformer Power (kVA)	Distance / Connection Method	Expected Isc at MLVS/MDB (kA)	Is Icu=35kA Sufficient?	Comment
<= 400	Any reasonable	<15	Yes, with large reserve	Our breakers are ideal. 50kA not needed.
630	Cable 10-30m	10 - 15	Yes, with large reserve	See Example 2.
630	Busway 5m	~15-18	Yes, with reserve	
1000	Cable 10-30m	15 - 22	Yes, with reserve	See Example 1.
1000	Busway 5m	~20-25	Yes	
1600	Cable 10m	~20-25	Yes	
1600	Cable 30m	~15-18	Yes, with reserve	
1600	Busway 5m	~30-35	Borderline / Need to verify	Precise calculation needed. 50kA may be required.
2500	Busway 5m	>50	No	Requires 50kA or higher breaker.
2500	Cable 30m	~20-25	Yes	Cable resistance significantly reduces Isc.

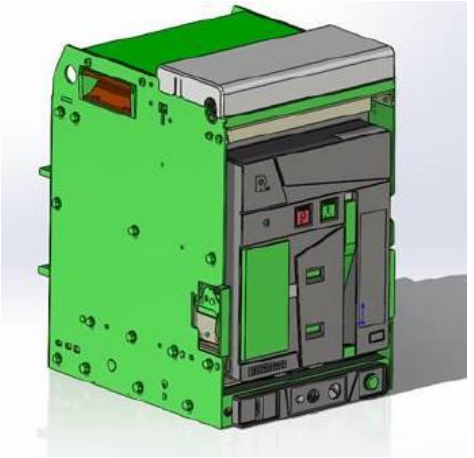
TOOLS FOR PROMOTION

Technical catalogs

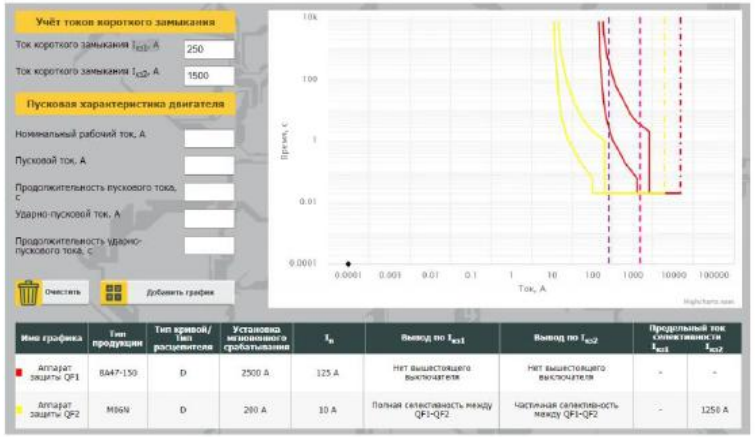
Software for CB selection



STEP and CAD models database



Selectivity calculator



User manuals

Passports in Vietnamese

BIM-TOOLS

AUTODESK REVIT

- EOM plugins:

Teslabim®

mySchema
бесплатный набор программ для автоматизации процесса проектирования разделов ЭОМ в Revit

- Libraries

Plans:

Addition of libraries (2025)

MKNS plugin (12.2024)

Busbar plugin (2025)

SCS plugin (2025)

nanoCAD BIM ЭЛЕКТРО

ModelStudioCS Kx

Renga

КОМПАС-3D

AVEVA

EPLAN electric P8

Plans:

Model studio equipment bases (ESHO?, ONI?, NVA?EUI?)

EPLAN equipment bases (ESHO? ONI? NVA?)

CAD-инструменты

AUTODESK®
AUTOCAD®

- DWG-чертежи оборудования
- STEP-модели
- Плагины

+ SmartLine
+ Плагин для динблоков МКНС;
+ Плагин для ШП;

Планы:

- Динблоки ЭОМ (2025)

nanoCAD

- DWG-чертежи оборудования
- STEP-модели
- Плагины

SmartLine

- Дин.блоки МКНС

Планы:

- Динблоки ЭОМ (2025)

GENERATION

ТРИНИТИ
РОСАТОМ

Electricity supply of the institute

РОСЭНЕРГОАТОМ
КУРСКАЯ АЭС

Supply of 0.4kV equipment for Kursk NPP-2

РОСЭНЕРГОАТОМ
БЕЛОЯРСКАЯ АЭС

Modernization of the main building and special building of power unit No. 4 of Beloyarsk NPP

РФЯЦ-ВНИИЭФ
РОСАТОМ

Electric power supply of building No. 37 of Sedakov Research Institute of Scientific and Research Institute of Information Technologies of the Russian Academy of Sciences (NIIS)

СИБИРСКАЯ ГЕНЕРИРУЮЩАЯ КОМПАНИЯ

Supply of 0.4kV equipment for Krasnoyarskaya CHPP-3

TATNEFT
ООО «Нижнекамская ТЭЦ»

Reconstruction of power boiler units

КВАДРА
ГЕНЕРИРУЮЩАЯ КОМПАНИЯ

Construction of a boiler house in Voronezh city

ТЕПЛОВАЯ КОМПАНИЯ
НОВГОРОДСКАЯ

Modernization of boiler houses in the Novgorod region

ЛУКОЙЛ
ЭНЕРГОСЕТИ

Supply of solutions for the needs of Lukoil Energy Networks

INDUSTRY

МФТИ

MIPT Data Center in Dolgoprudnyi

Донской Табак

Supply of ARMAT solutions for the power supply of the factory

Сбербанк

Sberbank Data Center in Balakovo

ЯКЗ Ядринский Кирпичный Завод

Reconstruction of a brick factory

Bratsk mining farm

ФГУП «ПСЗ»
ПРЕДПРИЯТИЕ ГОСКОРПОРАЦИИ «РОСАТОМ»

Reconstruction of the plant

Пермский завод МАШИНОСТРОИТЕЛЬ

Plant power supply

ВМП АВИТЕК

Reconstruction of the plant

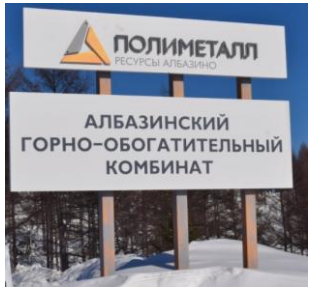
KIA MOTORS

ARMAT and LEDEL solutions for full cycle factory in Kazakhstan

METALLURGICAL INDUSTRY

МАГНИТОГОРСКИЙ МЕТАЛЛУРГИЧЕСКИЙ КОМБИНАТ

MMK reconstruction 3rd stage



ARMAT solutions for power supply of Albazinsky Mining and Processing Plant

МЗ
БАЛАКОВО

Power supply to the new workshops of the Balakovo plant

РУСАЛ

ARMAT solutions for the needs of RUSAL Group

БЕЛОРУССКИЙ МЕТАЛЛУРГИЧЕСКИЙ ЗАВОД

Reconstruction of the power supply shop

МЕЧЕЛ
Челябинский металлургический комбинат

Reconstruction of rolling shops 1,2,3,4,5 and blast furnace shop

ПАО «Алчевский металлургический комбинат»

Reconstruction of the plant

OIL AND GAS

TATNEFT

TANECO Combined hydrocracking unit, oil pump control stations

БАЛТИЙСКИЙ ХИМИЧЕСКИЙ КОМПЛЕКС

Supply of equipment for the Ust-Luga complex

ТРАНСНЕФТЬ УРАЛ

Reconstruction of LPDS

ЕВРОХИМ
МИНЕРАЛЬНО-ХИМИЧЕСКАЯ КОМПАНИЯ

Ust-Luga Ultramar mineral fertilizer transshipment port

РОСНЕФТЬ

Pravdinskoye Prirazlomnoye field

УРАЛКАЛИЙ

Reconstruction of mines

AGRICULTURE

СИБАГРО

АГРОЭКО
ГРУППА КОМПАНИЙ

Рязанские Росы

АгроПром
комплектация
Группа компаний

РУСАГРО
группа компаний

INFRASTRUCTURE

Shagal

ЭТАЛОН

ЖК Шагал

Nagatino i-Land

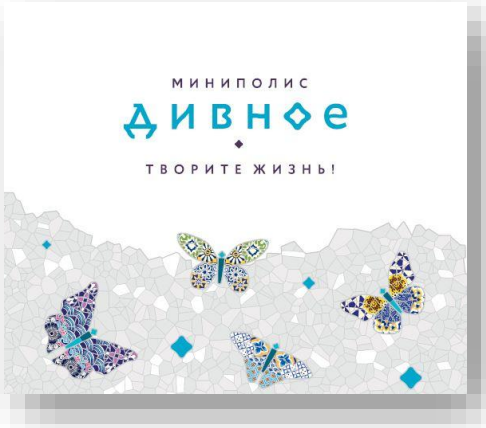
жилой остров

ЭТАЛОН

Residential Complex Symbol

Райффайзен БАНК

Branch Ave. Andropova



Residential Complex Divnoe Minipolis

INFRASTRUCTURE

Renovation, Mozhaisky, Gorbunova str.

Yuntolovo Residential Complex, St. Petersburg

House Chkalov, Kursk station

Botanika Residential Complex, Izhevsk

Rubin Residential Complex, Rostov-on-Don

INFRASTRUCTURE

Business Center Meridian, Leninsky 160

FORUM Center SibAgro Tomsk

SAVIN CITY

Residential Complex Savin City Kazan

Grand Line administrative building Kaluga

г. Nizhny Tagil Bright City, Safe City

IEK GROUP TRUSTED