

XU2 SERIES MOTOR PROTECTION SWITCH



INTRODUCTION

XU2 Motor Protection Switch is suitable for AC voltage up to 690V and current range from 0.1A to 100A. It provides protection against overload, phase failure, and short circuit for asynchronous motors. It can also be used for electrical line protection, infrequent load switching, and as an isolator.



GENERAL CHARACTERISTICS

The XU2 Series Motor Protection Switch and its associated accessories are fully compliant with the following international standards:

- **IEC 60947-1** – General Rules and Requirements
- **IEC 60947-2** – Circuit Breaker Standards
- **IEC 60947-4-1** – Electromechanical Contactors and Motor Starters

The XU2 Motor Protection Switch carries both CCC and CE certifications, reflecting its commitment to product quality, operational safety, and dependable performance across industrial applications. XU2 Motor Protection Switch has been design for rugged conditions @ 55° C and type two coordinated for IE3 premium Energy efficient Motor.



POLLUTION DEGREE

The XU2 Motor Protection Switch is rated at Pollution Degree 3, making it suitable for use in demanding industrial environments as classified under the IEC 947 standard. This ensures reliable operation even in conditions where conductive contamination or moisture may be present.



ENVIRONMENTAL RESPONSIBILITY

Environmental sustainability is a core consideration in the design and manufacture of the XU2 Motor Protection Switch. The product is built using materials that are predominantly recyclable, minimizing environmental impact at every stage of its lifecycle — from production through to end-of-life disposal.

XU2 Motor Protection Switch can be used at -5°C to $+55^{\circ}\text{C}$. Above $+55^{\circ}\text{C}$.

► TECHNICAL PARAMETERS



XU2- M20 WITH THERMAL MAGNETIC PROTECTION

PUSH BUTTON MOTOR PROTECTION SWITCH								
50/60Hz, AC-3 standard three-phase motor rated power			Thermal Trip setting range	Magnetic trip current	Breaking Capacity @ 415V	the current with case	Model (button control)	Weight
230V	400V	415V						
kW	kW	kW	A	A		A		kG
...	...	0.02	0.1-0.16	1.5	100kA	0.16	XU2-M2001	0.260
...	...	0.06	0.16-0.25	2.4	100kA	0.25	XU2-M2002	0.260
...	...	0.09	0.25-0.40	5	100kA	0.40	XU2-M2003	0.260
...	...	0.12	0.40-0.63	8	100kA	0.63	XU2-M2004	0.260
...	...	0.25	0.63-1	13	100kA	1	XU2-M2005	0.260
...	0.37	0.37	1-1.6	22.5	100kA	1.6	XU2-M2006	0.260
0.37	0.75	0.75	1.6-2.5	33.5	100kA	2.5	XU2-M2007	0.260
0.75	1.5	1.5	2.5 - 4	51	100kA	4	XU2-M2008	0.260
1.1	2.2	2.2	4 - 6.3	78	100kA	6.3	XU2-M2010	0.260
2.2	4	4	6-10.	138	100kA	9	XU2-M2014	0.260
3	5.5	5.5	9 - 14.	170	50kA	13	XU2-M2016	0.260
4	9	9	13-18	223	50kA	17	XU2-M2020	0.260
5.5	11	11	17-23	327	50kA	21	XU2-M2021	0.260
5.5	11	11	20-25	327	50kA	23	XU2-M2022	0.260
7.5	15	15	24-32	416	50kA	24	XU2-M2032	0.260

XU2-RS32 MOTOR WITH THERMAL MAGNETIC PROTECTIVE PROTECTION SWITCH

PUSH BUTTON CONTROL OR TRANSFER SWITCH CONTROL

50/60Hz, AC-3 standard three-phase motor rated power			Thermal Trip setting range	Magnetic trip current	Breaking Capacity @ 415V	Model (button control)	Weight
230V	400V	415V					
kW	kW	kW	A	A			kG
...	...	0.02	0.1-0.16	1.5	100kA	XU2-RS3201	0.260.
...	...	0.06	0.16-0.25	2.4	100kA	XU2-RS3202	0.260.
...	...	0.09	0.25-0.40	5	100kA	XU2-RS3203	0.260.
...	...	0.12	0.40-0.63	8	100kA	XU2-RS3204	0.260.
...	...	0.25	0.63-1	13	100kA	XU2-RS3205	0.260.
...	0.37	0.37	1-1.6	22.5	100kA	XU2-RS3206	0.260.
0.37	0.75	0.75	1.6-2.5	33.5	100kA	XU2-RS3207	0.260.
0.75	1.5	1.5	2.5 - 4	51	100kA	XU2-RS3208	0.260.
1.1	2.2	2.2	4 - 6.3	78	100kA	XU2-RS3210	0.260.
2.2	4	4	6-10.	138	100kA	XU2-RS3214	0.260.
3	5.5	5.5	9 - 14.	170	50kA	XU2-RS3216	0.260.
4	9	9	13-18	223	50kA	XU2-RS3220	0.260.
5.5	11	11	17-23	327	50kA	XU2-RS3221	0.260.
5.5	11	11	20-25	327	50kA	XU2-RS3222	0.260.
7.5	15	15	24-32	416	50kA	XU2-RS3232	0.260.

➤ SWITCH SELECTION

➤ TECHNICAL PARAMETERS

XU2-LS32 MOTOR WITH THERMAL MAGNETIC PROTECTIVE PROTECTION SWITCH

TRANSFER SWITCH CONTROL								
50/60Hz, AC-3 standard rated power of three-phase motor				Magnetic trip current (I _d ± 20%)	Breaking Capacity @ 415V	With JRS4-d overload relay	Model (button control)	Weight
230V	400V	415V	Protecting rating					
kW	kW	kW	A	A				kG
...	...	...	0.4	5	100kA	JRS4-1303d	XU2-LS3203	0.330.
...	...	...	0.63	8	100kA	JRS4-1304d	XU2-LS3204	0.330.
...	...	...	1	13	100kA	JRS4-1305d	XU2-LS3205	0.330.
...	0.37	...	1.6	22.5	100kA	JRS4-1306d	XU2-LS3206	0.330.
0.37	0.75	0.75	2.5	33.5	100kA	JRS4-1307d	XU2-LS3207	0.330.
0.75	1.5	1.5	4	51	100kA	JRS4-1308d	XU2-LS3208	0.330.
1.1	2.2	2.2	6.3	78	100kA	JRS4-1310d	XU2-LS3210	0.330.
2.2	4	4	10	138	100kA	JRS4-1314d	XU2-LS3214	0.330.
3	5.5	5.5	14	170	50kA	JRS4-1316d	XU2-LS3216	0.330.
4	9	9	18	223	50kA	JRS4-1321d	XU2-LS3220	0.330.
5.5	11	11	25	327	50kA	JRS4-1322d	XU2-LS3222	0.330.
7.5	15	15	32	416	50kA	JRS4-2355d	DZS32-LS3232	0.330.



XU2-ME50C MOTOR WITH THERMAL MAGNETIC PROTECTIVE PROTECTION SWITCH

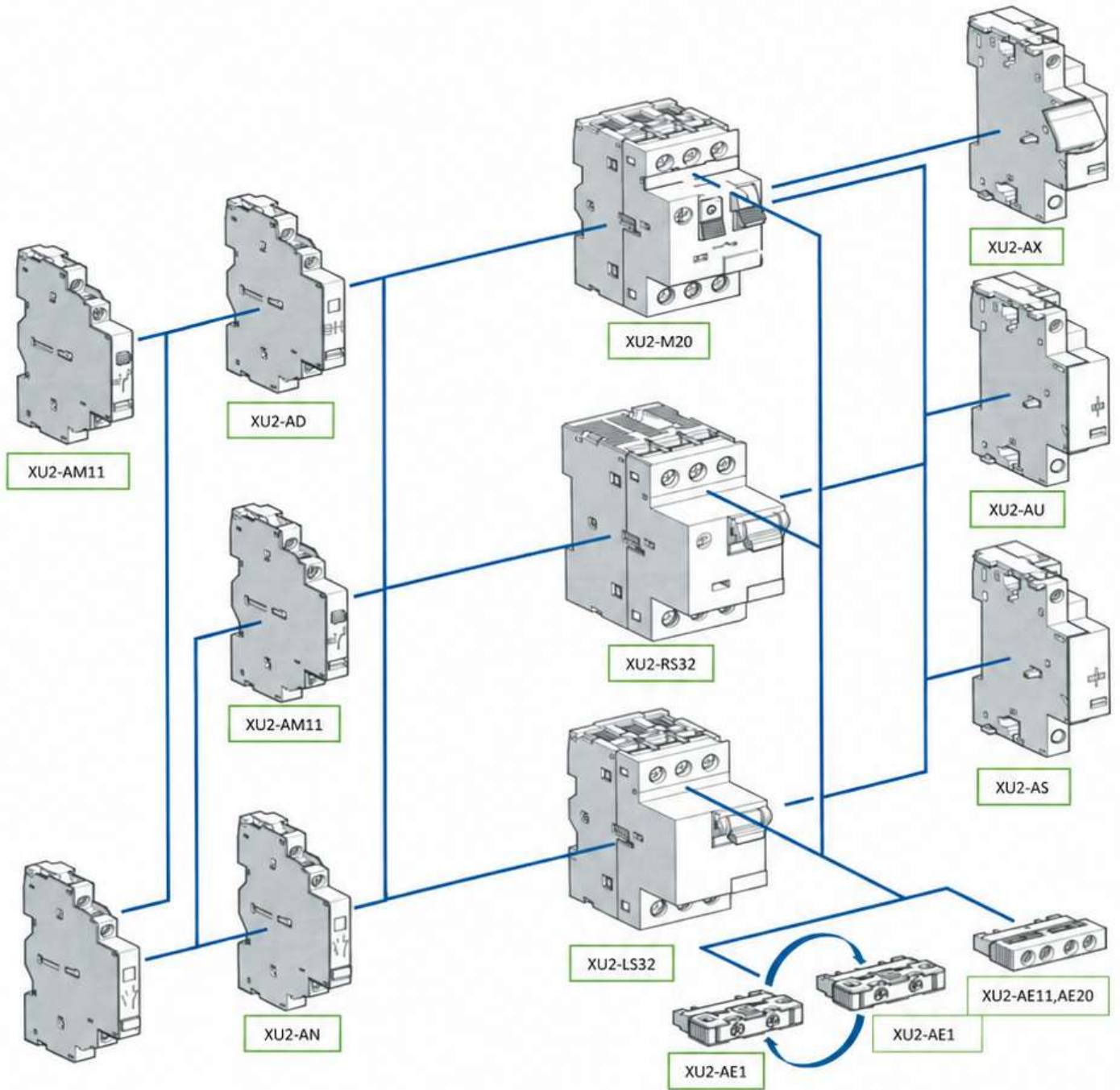
TRANSFER SWITCH CONTROL

50/60Hz, AC-3 standard rated power of three - phase motor			Thermal Trip setting range	Magnetic trip current (I _d +_ 20%)	Breaking Capacity @ 415V	Model (button control)	Weight
230V	400V	415V					
kW	kW	kW	A	A			kG
-	0.37	-	1-1.6	19.2	100kA	XU3-ME50C06	0.6
0.37	0.75	1.1	1.6-2.5	30	100kA	XU3-ME50C07	0.6
0.75	1.5	1.5	2.5-4	48	100kA	XU3-ME50C08	0.6
1.1	2.2	2.2	4-6.	72	100kA	XU3-ME50C10	0.6
2.2	4	4	06 - 10.	120	100kA	XU3-ME50C14	0.6
4	7.5	7.5	10 - 16.	J92	100kA	XU3-ME50C20	0.6
5.5	11	11	16-25	300	100kA	XU3-ME50C25	0.6
11	18.5	22	25-40	480	100kA	XU3-ME50C40	0.7
15	30	33	40-63	756	100kA	XU3-ME50C63	0.7
22	40	45	56-80	960	100kA	XU3-ME50C80	0.7

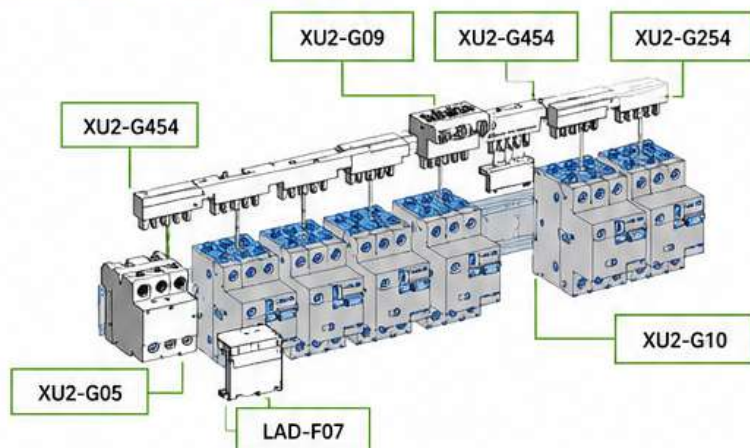
XU2 SERIES MOTOR PROTECTION SWITCH

ELECTRICAL ACCESSORIES

>WIRING DIAGRAM

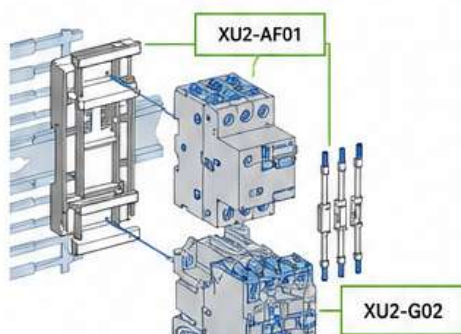


> TECHNICAL PARAMETERS



ADDITIONAL CONTACT BLOCK

Type	Install	Contact Type	Model	Weight
Instantaneous auxiliary contact	Front (1 block per circuit breaker)	N/O+N/C	XU2-AE1	0.020
		N/O+N/C	XU2-AE11	0.020
		N/O+N/O	XU2-AE20	0.020
	side (up to 2 pieces on the left side of the circuit breaker)	N/O+N/C	XU2-AN11	0.020
		N/O+N/O	XU2-AN20	0.020
Fault signal contact + instantaneous auxiliary contact	Side (1 block to the left of the circuit breaker)	N/O(Errors)+N/O	XU2-AD1010	0.055
		N/O(Errors)+N/C	XU2-AD1001	0.055
		N/C(Errors)+N/O	XU2-AD0110	0.055
		N/O(Errors)+N/C	XU2-AD0101	0.055
Short circuit signal contact	Side (1 block to the left of the circuit breaker)	C./O Ordinary point	XU2—AM11	0.045

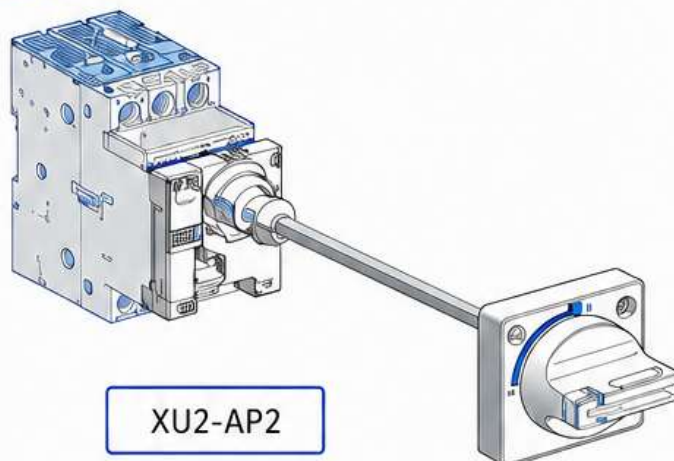


ELECTRIC TRIP

Type	Install	Voltage	Model	Weight
Low- voltage trip	Side (1 block to the left of the circuit breaker)	110-127V 50Hz	XU2-AU115	0.105
		220-240V 50Hz	XU2-AU225	0.105
		380-415V 50Hz	XU2-AU385	0.105
Parallel trip	Side (1 block to the left of the circuit breaker)	110-127V 50Hz	XU2-AS115	0.105
		220-240V 50Hz	XU2-AS225	0.105
		380-415V 50Hz	XU2-AS385	0.105
Low - voltage trip INRS	Side (1 block to the left of the circuit breaker)	110-127V 50Hz	XU2-AX115	0.110
		220-240V 50Hz	XU2-AS225	0.110
		380-415V 50Hz	XU2-AS385	0.110

➤ SWITCH SELECTION

➤ TECHNICAL PARAMETERS



XU2-AP2

INSTALLATION ACCESSORIES

Type	Application	Model	Weight
Motor starting socket board	Install one XU2- 20 and one ETR-D09 3- pole wiring to D25 Contactor	XU2-AF01	0.120

LOCKABLE EXTERNAL CONTROL KNOB (IP54)

Application	Model	Weight
For XU2-RS32, XU2-LS32 (150-290mm)	XU2—AP03	0.280

BUSBAR ACCESSORIES

Type	Application	Spacing	Model	Weight
3-pole busbar 63A	2 branches	45	XU2-G245	0.036
		54	XU2-G254	0.038
		72	XU2-G272	0.042
	3 branches	54	XU2-G354	0.058
	4 branches	45	XU2-G445	0.077
		54	XU2-G454	0.085
		72	XU2-G472	0.094
5 branches	54	XU2-G554	0.100	
Protective terminal cover	Protect unused busbar output	—	XU7-G10	0.005
Terminal Block	Top connection	—	XU7-G09	0.040

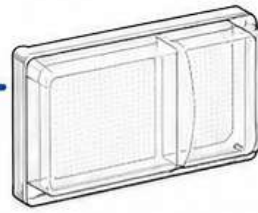
Note: The safety device of the dangerous machine complies with INRS and VDE0113 and must be installed on XU2—M20 or XU2—ME14.

XU2 SERIES MOTOR PROTECTION SWITCH

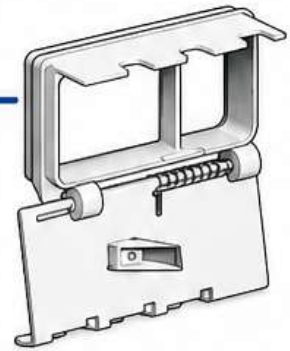
ELECTRICAL ACCESSORIES



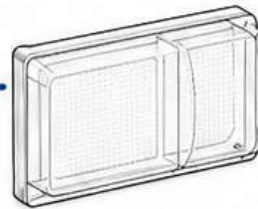
XU2-MC



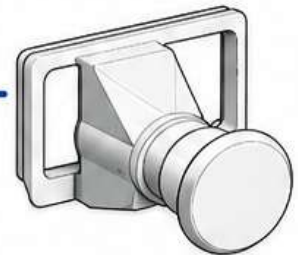
XU2-V01



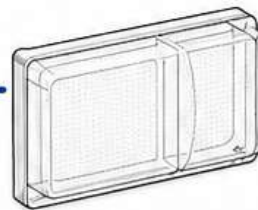
XU2-V01



XU2-K01



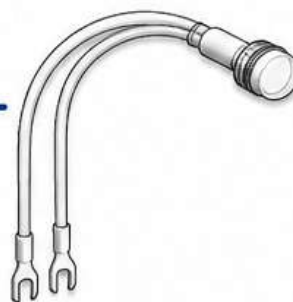
XU2-K01



XU2-E01



XU2-E01



XU2-SN

TECHNICAL PARAMETERS

MOTOR PROTECTION CASE FOR THERMAL MAGNETIC CIRCUIT BREAKER				
Type	Application	Enclosure protection level	Model	Weight (kg)
Surface mount, double insulation can seal the cover and protect the conductive parts.	For motor circuit breakers with or without accessories (up to 1 with right or left)	IP41	XU2-MC01	0.290
		IP55	XU2-MC02	0.300

MOTOR PROTECTION CASE FOR THERMAL MAGNETIC CIRCUIT BREAKER				
Type			Model	Weight (kg)
Locking device (1) with XU2-M control knob (only locked in the "0" position)			XU2-V01	0.075
Spring return			XU2-K01	0.052
Mushroom stop button (1) 40mm, red	Lock up	Loose keys (press Jian n" 455)	XU2-K02	0.095
		Rotation release	XU2-K03	0.052
Sealing means	For DZS 12 MC01	IP 55	XU2-E01	0.012
		IP 55 at temperature <+5°C	XU2-E02	0.012
Center line connection			XU2-N01	0.030

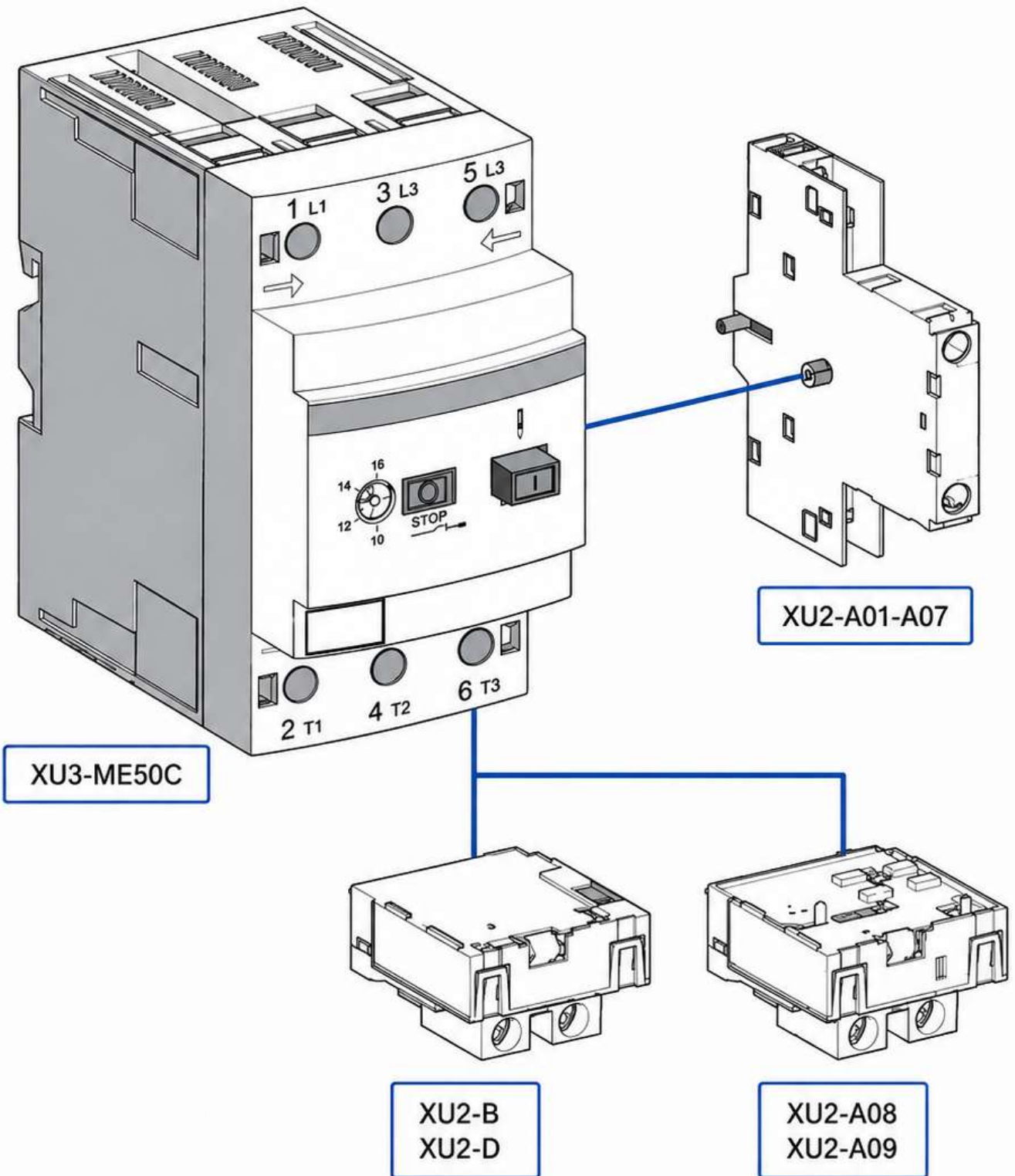
Type	Voltage (V)	Colour	Model	Weight (kg)
Neon Light	110	Green	XU2-SN13	0.019
		Red	XU2-SN14	0.019
	220/240	Green	XU2-SN23	0.019
		Red	XU2-SN24	0.019
	380/440	Green	XU2-SN33	0.019
		Red	XU2-SN34	0.019

(1) With IP55 sealing device.

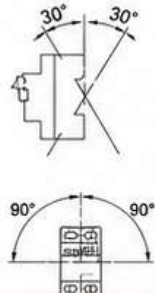
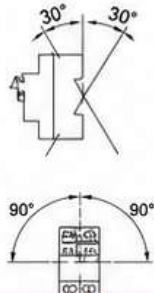
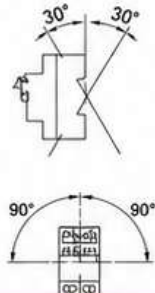
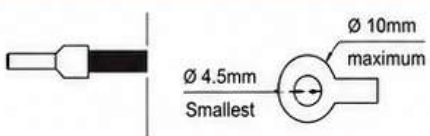
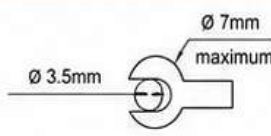
ADDITIONAL CONTACT BLOCK				
Type	Install	Contact type	Model	Weight (kg)
Instantaneous auxiliary contact	Side1 block on the right side of the circuit breaker	N/C+N/O	XU2-A01	0.060
		N/O+N/O	XU2-A02	0.060
		N/C+N/O+N/O	XU2-A03	0.070
		N/O+N/O+N/O	XU2-A05	0.070
		N/O+N/O+2 Passive terminal block	XU2-A06	0.070
		N/C+N/O+2 Passive terminal block	XU2-A07	0.030
Fault signal contact	Inside1 inside circuit breaker)	N/C	XU2-A08	0.030
		N/O	XU2-A09	0.030

ELECTRIC TRIP				
Type	Install	Voltage	Model	Weight (kg)
UV Release	Inside (1 inside circuit breaker)	110-127V 50Hz	XU2-B11	0.070
		220-240V 50Hz	XU2-B22	0.070
		380-415V 50Hz	XU2-B38	0.070
Stunt Release	Inside (1 inside circuit breaker)	110-127V 50Hz	XU2-D11	0.070
		220-240V 50Hz	XU2-D22	0.070
		380-415V 50Hz	XU2-D38	0.070

> WIRING DIAGRAM



Technical Parameters

TYPE		XU2-M20, ME14	XU2-RS32	XU2-LS32	XU3-M50C, ME50C				
Standard compliant		EN 60 947-1,947-2, 947-4-1							
Protective treatment		"Damp heat"	"Damp heat"	"Damp heat"	"TC"				
Impact resistance according to IEC 68-2-27		30g	30g	30g	22g				
Vibration resistance according to IEC 68-2-6		5g(5-150Hz)	5g(5-150Hz)	5g(5-150Hz)	2.5g(0-2.5Hz)				
Ambient storage temperature	°C	-40~+80	-40~+80	-40~+80	-40~+80				
Working temperature	°C	-20~+60	-20~+60	-20~+60	-20~+60				
Temperature compensation	°C	-20~+60	-20~+60	NA.	-20~+60				
Flame retardance according to IEC 695-2-1	°C	960	960	960	960				
Maximum working altitude	m	2000	2000	2000	2000				
Work Location					More suitable for vertical use.				
Number of wires and cross—section		maximum	Smallest	maximum	Smallest	Smallum	Smallest	Smallest	Smallest
Hard wire	mm2	2x6	2x1	2x6	2x1	2x6	2x1	1x35	1x2.5
Flexible wires without terminal	mm2	2x6	2x1.5	2x6	2x1.5	2x6	2x1.5	2x16	1x2.5
Flexible wires with terminal blocks	mm2	2x4	2x1	2x4	2x1	2x4	2x1	2x16	1x2.5
									
Suitable for isolation Meets IEC 947-1 §7-1-6		Suitable		Suitable		Suitable		-	
Tightening torque	Nm	1.7		1.7		1.7		5	
Resistant to mechanical shock	J	0.5		0.5		0.5		0.5	

TECHNICAL PARAMETERS

PARAMETER	UNIT	XU2-M20,ME14	XU2-RS32	XU2-LS32	XU3-M50C,ME50C		
Use category	—	A	A	A	A		
Compliant with IEC 947-2 In accordance with IEC 947-4-1	—	AC-3	AC-3	AC-3	-		
Rated working voltage (Ue) Compliant with IEC 947-2	V	690	690	690	690		
Rated working voltage (Ui) Compliant with IEC 947-2	V	690	690	690	690		
Rated working frequency Compliant with IEC 947-2	Hz	50/60	50/60	50/60	50/60		
Rated impulse withstand voltage (Uimp) Compliant with IEC 947-2	kV	6	6	6	6		
Total energy dissipated at each pole	W	2.5	2.5	1.8	XU3-8025 and below	XU3-8040,8063	XU3-8080
					3	6	8
Mechanical life (C.O,off,on)	C.O.	100000	100000	100000	60000	50000	50000
Electrical life (for AC-3 load)	C.O.	100000	100000	100000	60000	50000	50000
Load level (maximum operating frequency)	C.O./h	50	50	50	50		
Specified load In accordance with IEC 947 -4-1	—	Continuous load	Continuous load	Continuous load			

ELECTRICAL TRIP CHARACTERISTICS

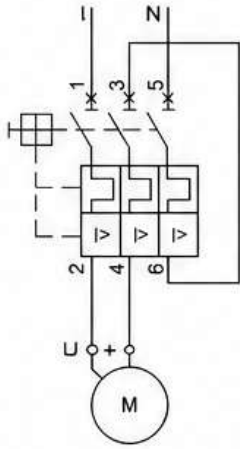
RELEASE TYPE			XU2-AU	XU2-AX	XU2-AS	XU2-B	XU2-D
Rated insulation voltage (Ui) Meets IEC 947-1		V	690	500	690	690	690
Operating Voltage Meets IEC 947 -1		V	0.85-1,1Un	0.85-1,1Un	0.7-1,1Un	0.8-1, 1Un	0.8-1, 1Un
Release voltage		V	0.7-3.5Un	0.7-3.5Un	0.75-0.2Un	0.7-0.35Un	0.7-0.35Un
Pull-in power consumption		VA	12	12	14	12	12
		W	8	8	10.5	7	7
Push power		VA	3.5	3.5	5	7	7
		W	1.1	1.1	1.6	2.5	2.5
Action time Compliant with IEC947-1		ms	From the voltage reaches its operating value until the circuit breaker opens 10			10	10
Load factor			100%	100%	100%	100%	100%
Wiring	Number of wires		1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
	Hard -weird	mm	1-2.5	1-2.5	1-2.5	1-2.5	1-2.5
	Flexible wire without terminal	mm	0.75-2.5	0.75-2.5	0.75-2.5	0.75-2.5	0.75-2.5
	Flexible conductor with terminal	mm	0.75-1.5	0.75-1.5	0.75-1.5	0.75-2.5	0.75-2.5
Tightening torque		N.M	1.4max	1.4max x	1.4max	1.2	1.2
Mechanical life (C.O: closed /opened)		C.O.	100000	100000	100000	50% of circuit breaker mechanical life	50% of circuit breaker mechanical life



WIRING DIAGRAM

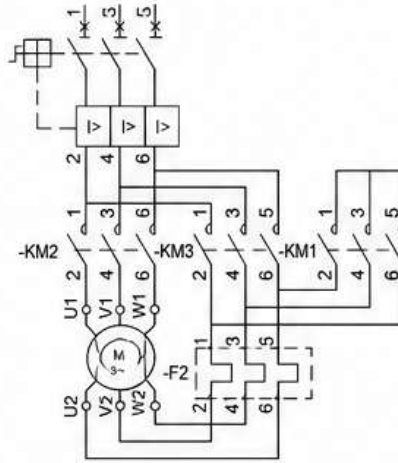
Single-phase or DC motor

RS32;
 XU2— M20, ME14, RS32;
 XU3— M50C, ME50C

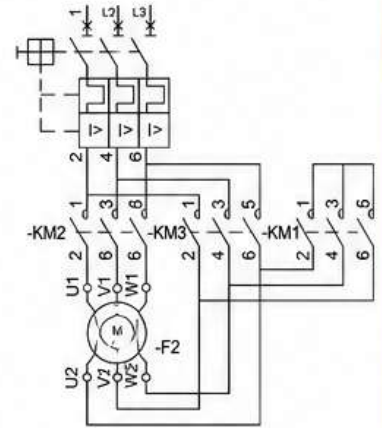


Star *Delta Launch

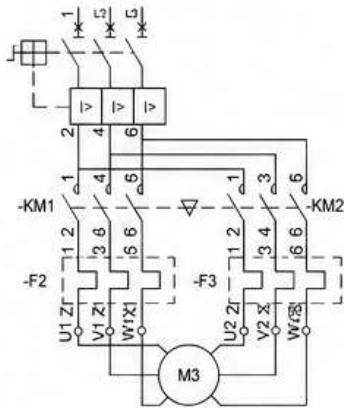
XU2 - LS32



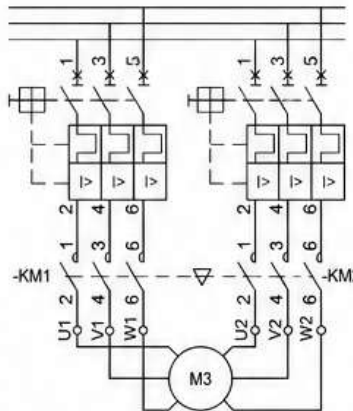
XU2 - M20, ME14,
 XU3 - M50C, ME05



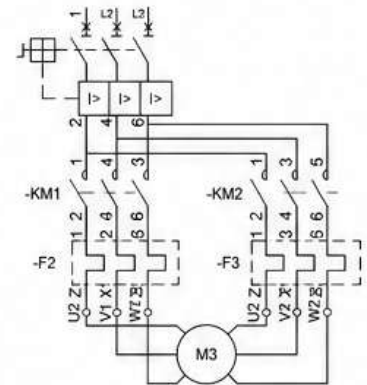
Two -speed motor with separate Windings on the same power source 2 XU2 - LS32



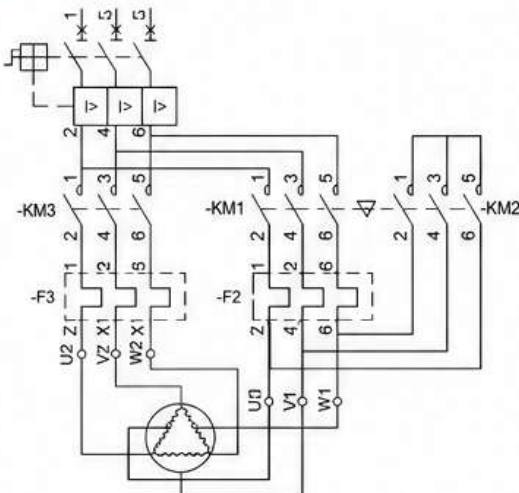
2 Power XU2 - M20, ME14, RS32; XU3 - M50C, ME50C



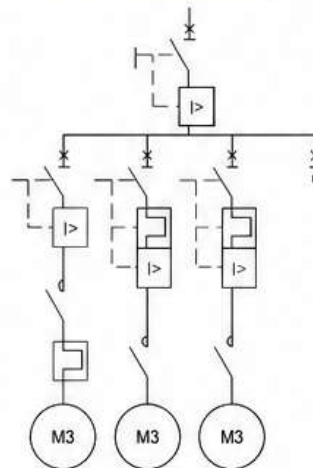
Partial winding motor XU2 - LS32



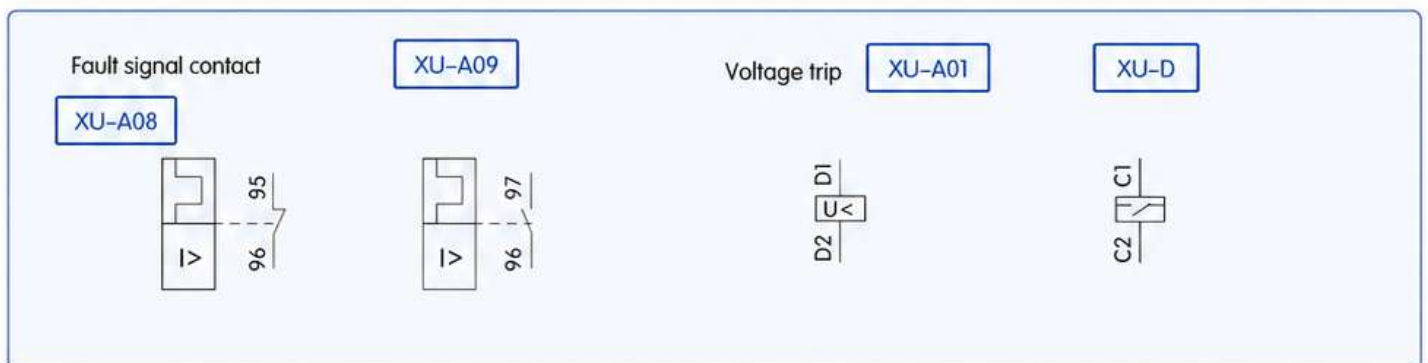
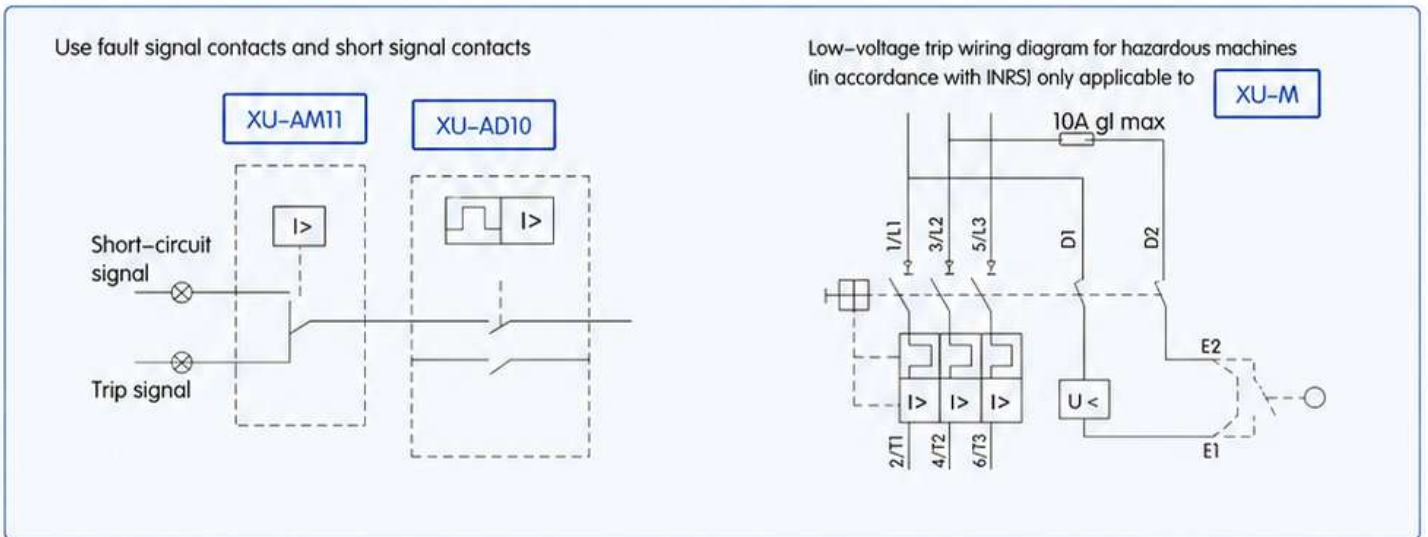
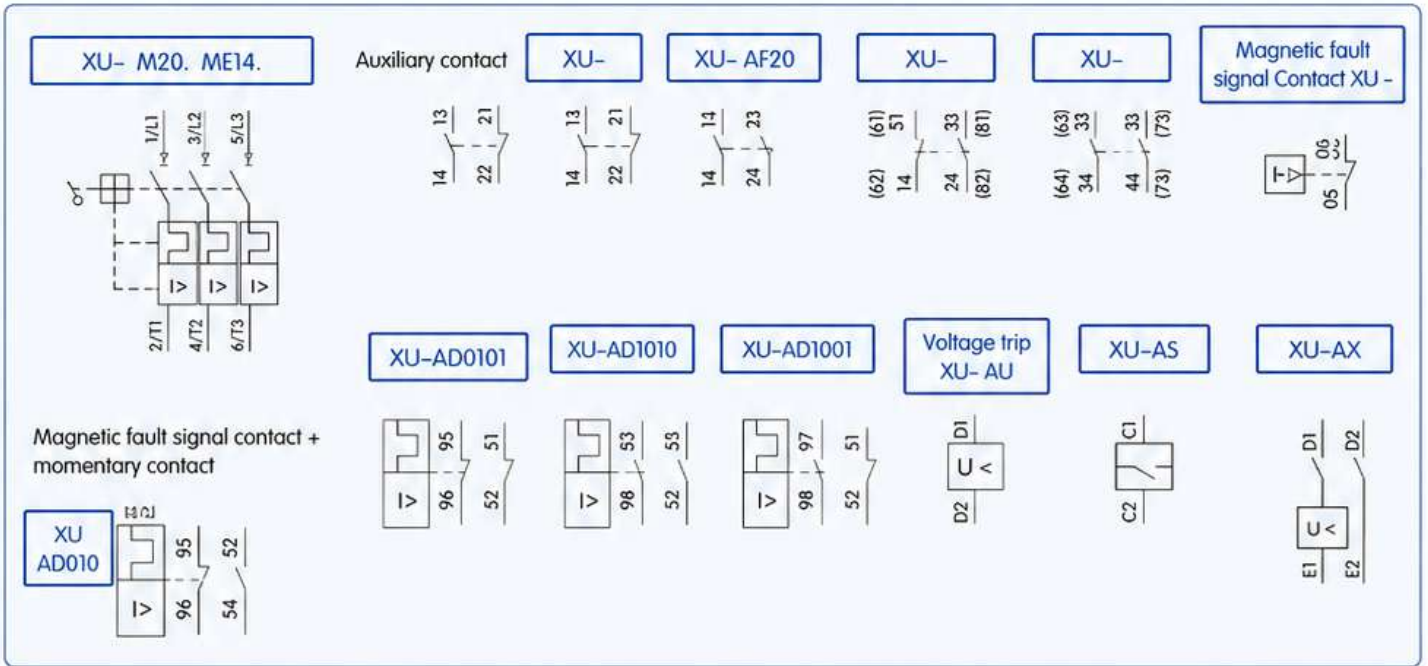
Pole change XU2-LS32



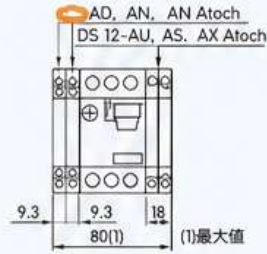
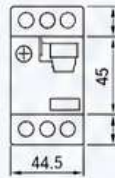
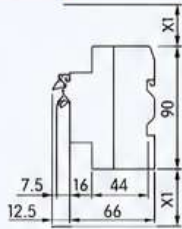
Has completed protection XU2 - LS32



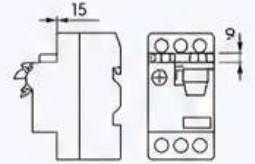
WIRING DIAGRAM



XU- RS32



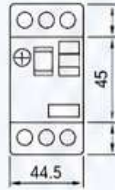
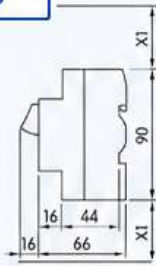
XU-AE



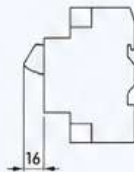
XU-RS32

X1 Clearance =40mm, $U_e \leq 440V$

XU-M20, ME13

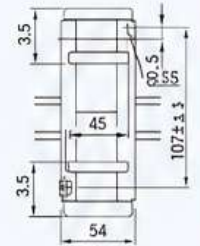
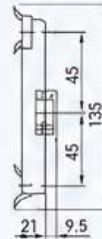


XU-AX



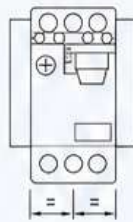
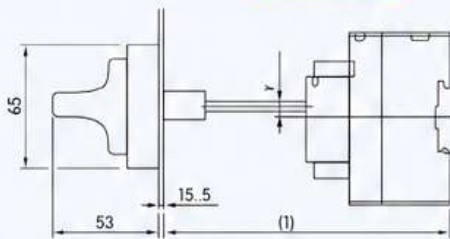
AX-AF

Mounting plate

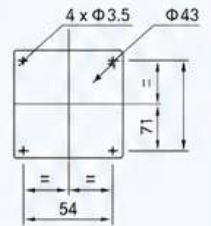
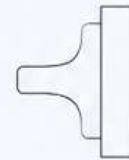


Installing a wrench on the door

XU-AP03



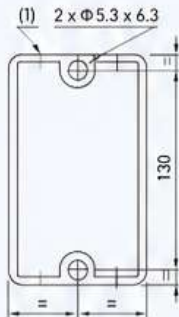
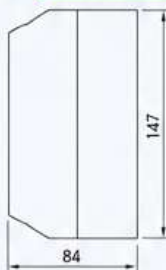
Drilling holes in the door



(1) The minimum value is 150, and the large value is 290

Surface mount housing

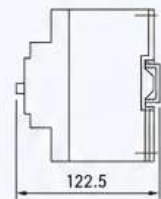
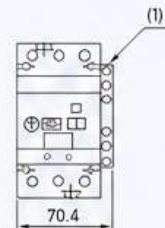
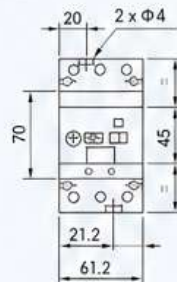
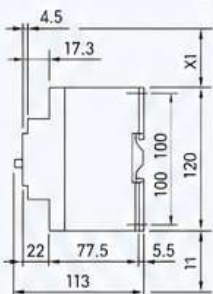
XU-MC0



Motor circuit breaker

XU-M50C, ME50C

On AM1-DF200 or AM1-ED201 rail



X1=Clearance(ISC maxi)

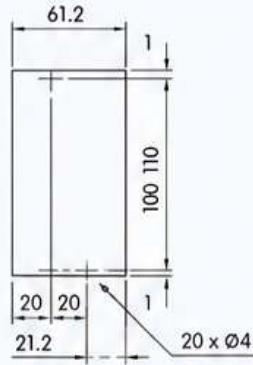
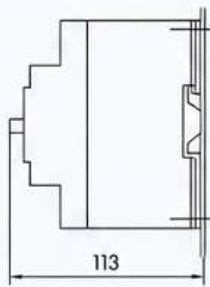
40mm, Suitable for $U_e < 500V$
50mm, Suitable for $U_e < 690V$

XU- A01 to A07 module

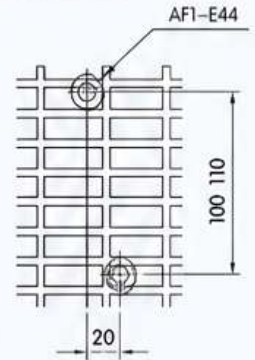
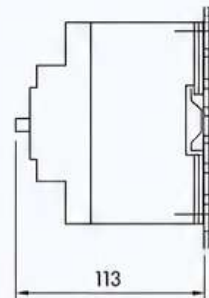


► WIRING

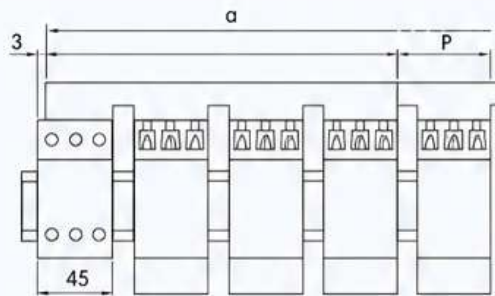
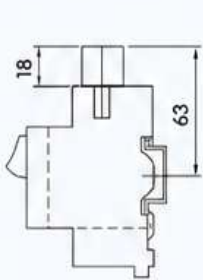
Mounted on the panel



On perforated mounting plate AM1-PA

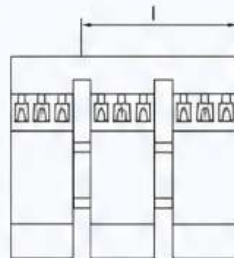
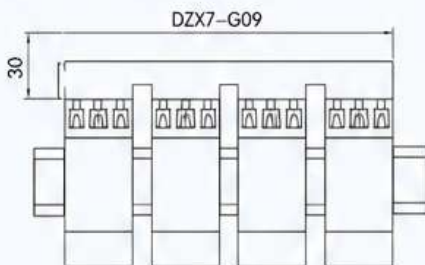


Busbar G: XU-G445, XU-G4545, XU-G472, with terminal block xu-G05



XU- G445(4*45mm)		P		
XU- G454(4*54mm)	179	45		
XU- G472(4*72mm)	206	54		
	260	72		
Number of branches	A			
	5	6	7	8

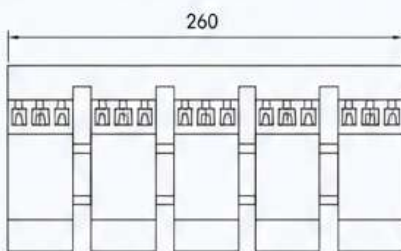
Busbar XU2 -G *** with terminal block XU2 - G09



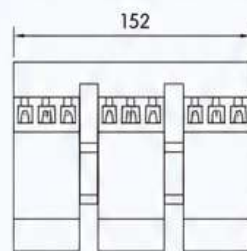
Busbar XU2- G245, XU2- G254, XU2- G272

XU2- G245 (2*45mm)	l
XU2- G245 (2*54mm)	89
XU2- G272 (2* 72mm)	98
	116

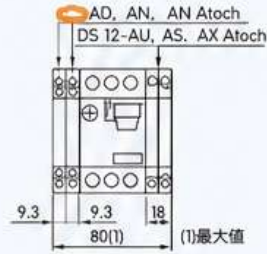
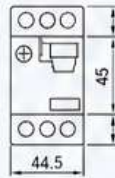
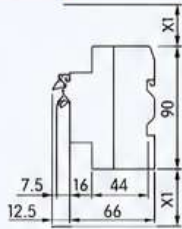
Busbar XU2 - G554



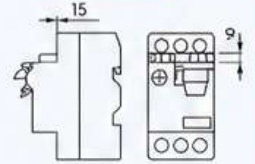
Busbar XU2 - G354



XU- RS32



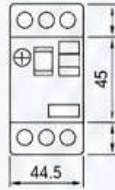
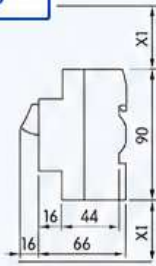
XU-AE



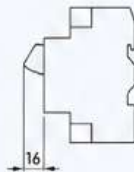
XU-RS32

X1 Clearance =40mm, Ue<440V

XU-M20, ME13

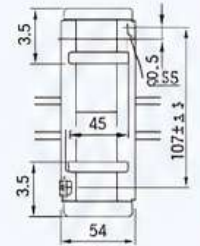
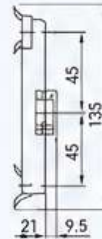


XU-AX



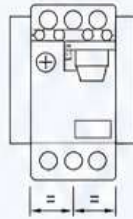
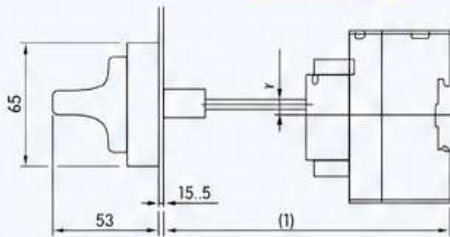
AX-AF

Mounting plate

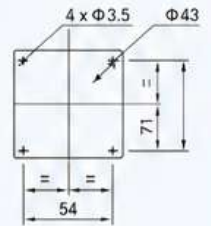
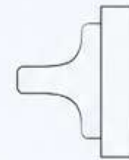


Installing a wrench on the door

XU-AP03



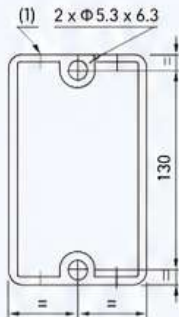
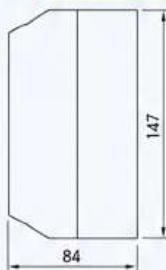
Drilling holes in the door



(1) The minimum value is 150, and the large value is 290

Surface mount housing

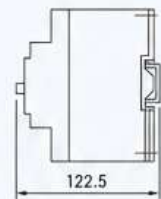
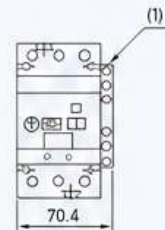
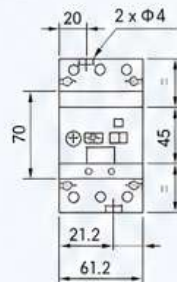
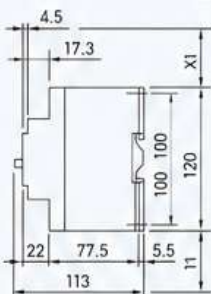
XU-MC0



Motor circuit breaker

XU-M50C, ME50C

On AM1-DF200 or AM1-ED201 rail



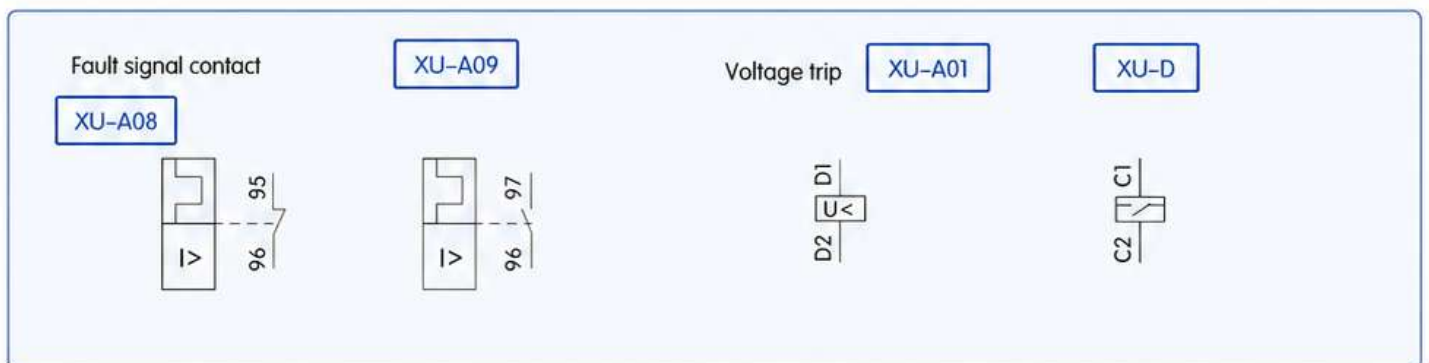
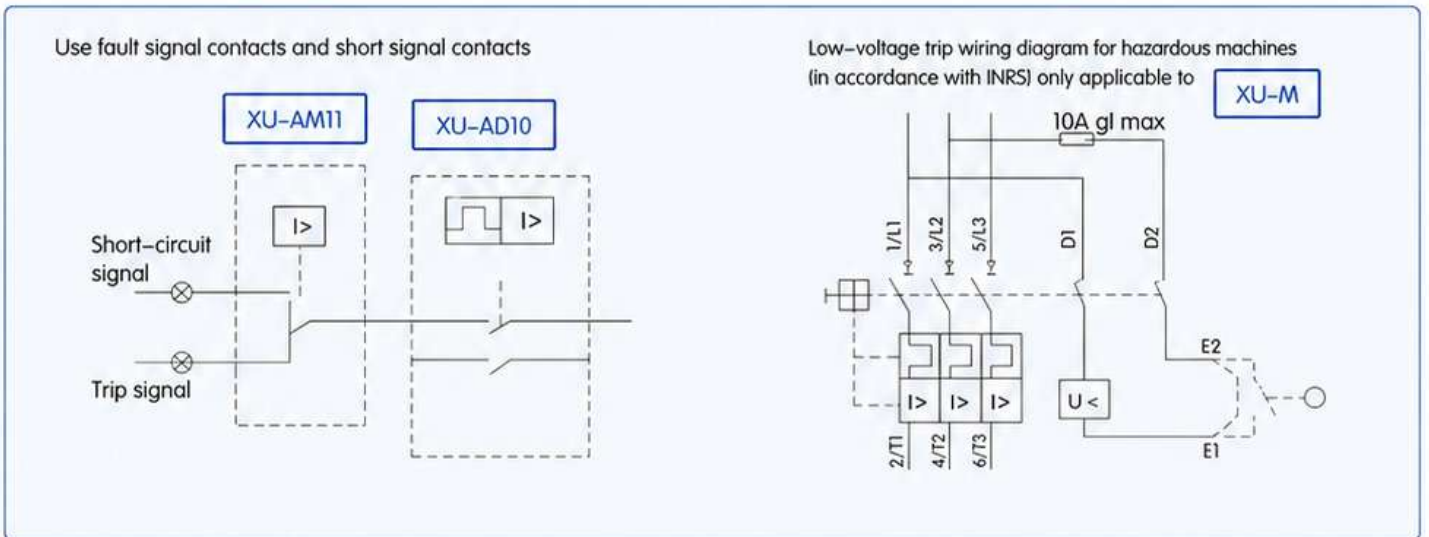
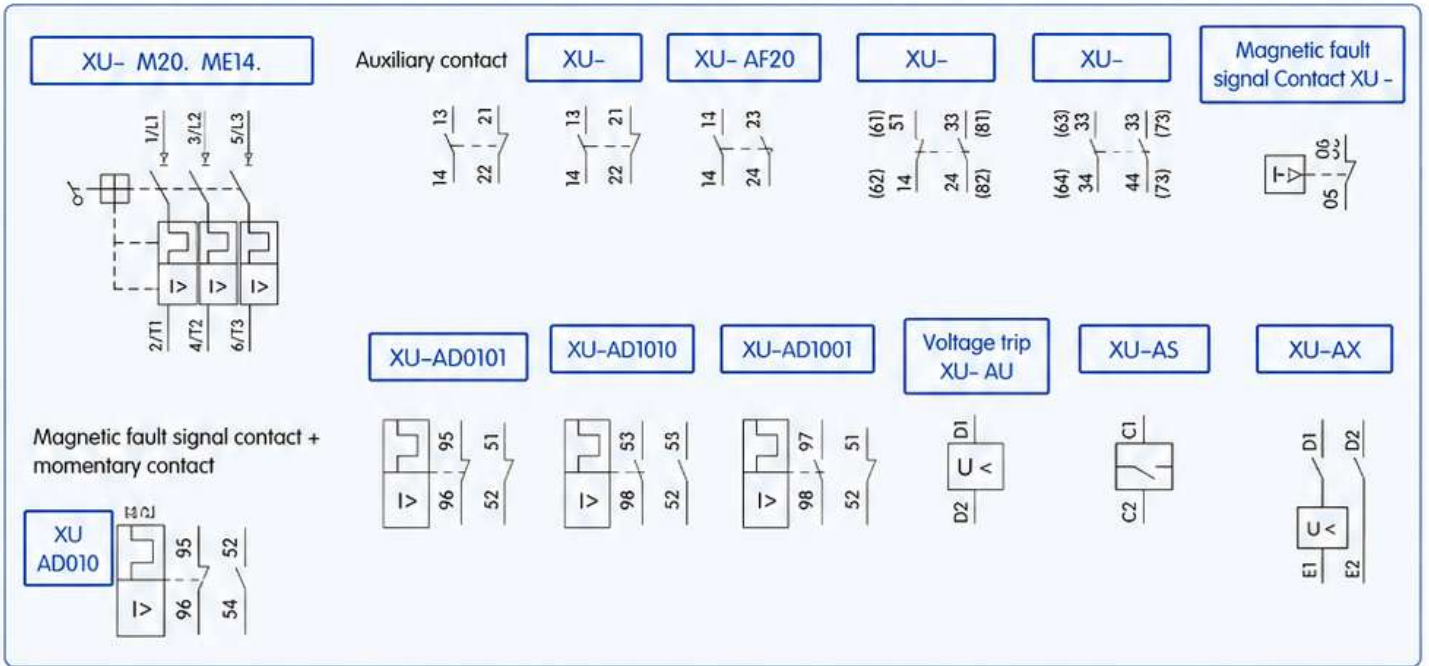
X1=Clearance(ISC maxi)

40mm, Suitable for Ue <500V
50mm, Suitable for Ue <690V

XU- A01 to A07module



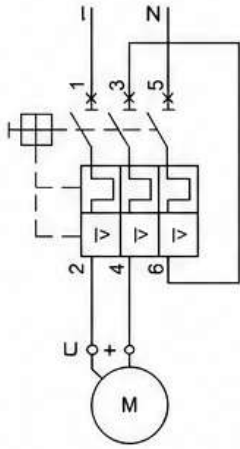
WIRING DIAGRAM



WIRING DIAGRAM

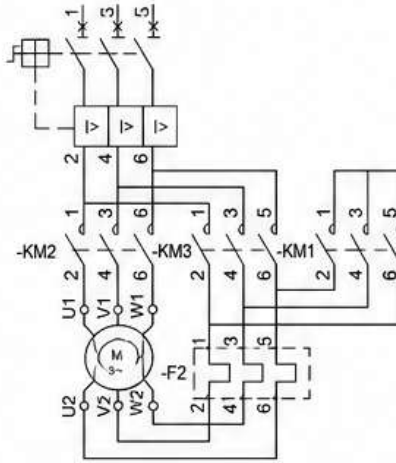
Single-phase or DC motor

RS32;
 XU2— M20, ME14, RS32;
 XU3— M50C, ME50C

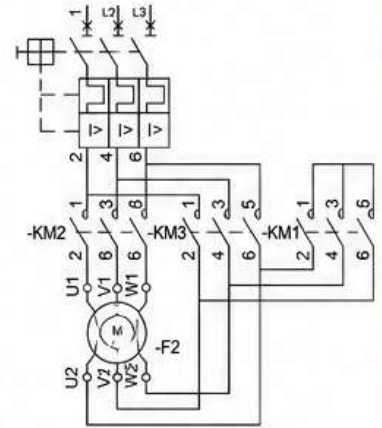


Star *Delta Launch

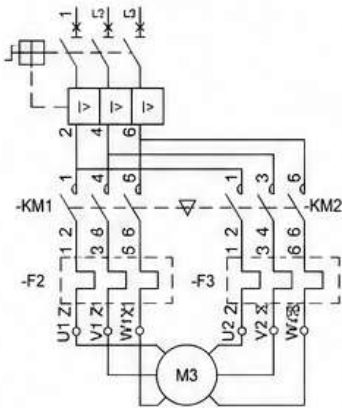
XU2 - LS32



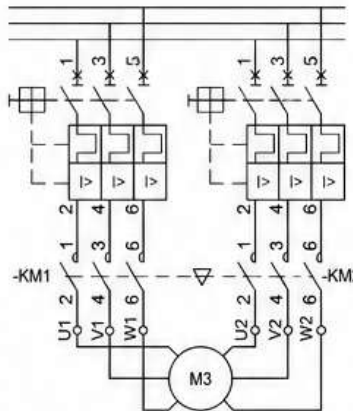
XU2 - M20, ME14,
 XU3 - M50C, ME05



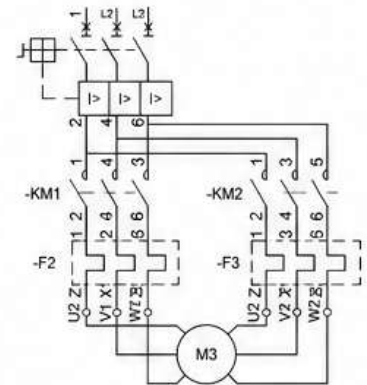
Two -speed motor with separate Windings on the same power source 2 XU2 - LS32



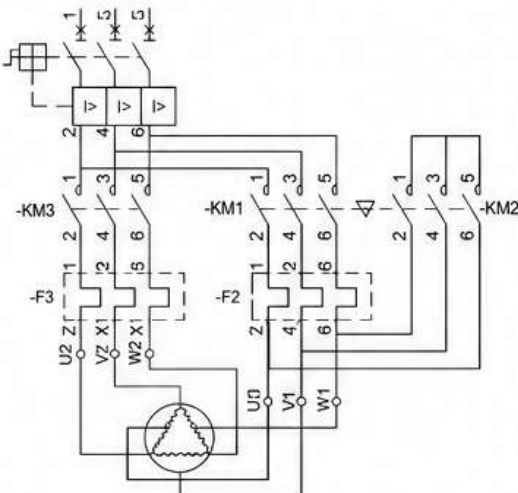
2 Power XU2 - M20, ME14, RS32; XU3 - M50C, ME50C



Partial winding motor XU2 - LS32



Pole change XU2-LS32



Has completed protection XU2 - LS32

