



Zhejiang Hannuo Electric Co.,Ltd.

Dongfeng Industrial Zone Yueqing, Zhejiang,
325605, P.R.China

TEL:+86-577-57171337

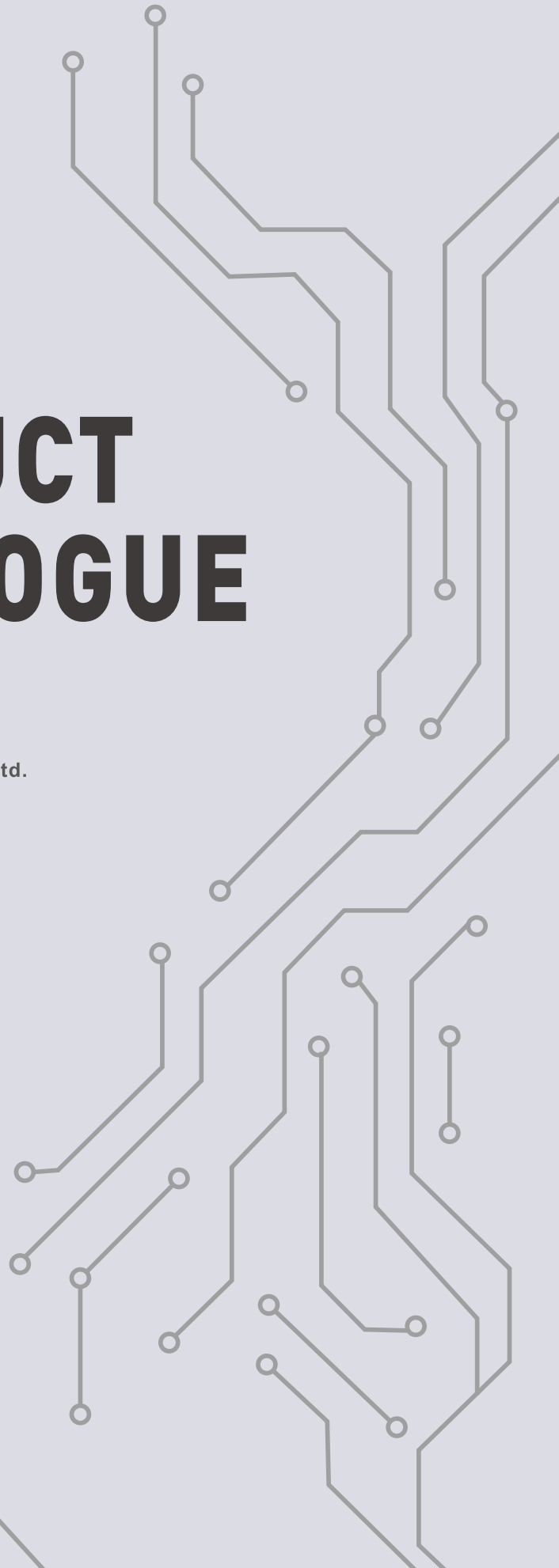
FAX:+86-577-57171336

E-Mail:info@samwha-dsp.com

Website:www.samwha-dsp.com

PRODUCT CATALOGUE 2025

Zhejiang Hannuo Electric Co.,Ltd.





Smart Electric Component Supplier

Zhejiang Hannuo Electric Co., Ltd. has been committed to providing customers with high-quality electrical products since its establishment. We mainly produce control relays, protection relays, measuring meters, power factor controller, AC contactors, circuit breakers, etc more than 200 general electrical products and products in power quality management.

Hannuo Electric's number one priority is to meet customer needs with quality products and outstanding reliability. We emphasize continuous design and productivity improvements to provide real value to our customers.

We will keep in touch with our customers with a modest heart based on the business philosophy of "fine and specialized", and promise to do our best to create the highest satisfaction and achievement in everything with our customers.

All of us at Hannuo Electric are committed to continuously challenging and innovating in creating customer value and becoming a more reliable global company.





Power Factor Controllers



Surge Protection Devices



Magnetic Contactors



Cam Switches



Protection Relays



Digital Measuring Devices



Control Relays

TIMER

"Precise time control, smart delay start—
Providing a stable and reliable timing solution for electrical systems."



ERV-60



ERV-08



DRV-08



DRV-01DM

Single Function Time Relays

Product Code	Mode	Explanation	Dimensions (mm)	Time Range	220V AC	24V AC/DC	Rail type	Pcs. / Carton
ERV-03	Adjustable	On Delay Timer	T1-Din	0.1-3 sec.	√	√	√	120
ERV-06	Adjustable	On Delay Timer	T1-Din	0.1-6 sec.	√	√	√	120
ERV-12	Adjustable	On Delay Timer	T1-Din	0.1-12 sec.	√	√	√	120
ERV-30	Adjustable	On Delay Timer	T1-Din	0.1-30 sec.	√	√	√	120
ERV-60	Adjustable	On Delay Timer	T1-Din	0.1-60 sec.	√	√	√	120
ERV-03D	Adjustable	On Delay Timer	T1-Din	0.1-3 min.	√	√	√	120
ERV-06D	Adjustable	On Delay Timer	T1-Din	0.1-6 min.	√	√	√	120
ERV-12D	Adjustable	On Delay Timer	T1-Din	0.1-12 min.	√	√	√	120
ERV-30D	Adjustable	On Delay Timer	T1-Din	0.1-30 min.	√	√	√	120
ERV-60D	Adjustable	On Delay Timer	T1-Din	0.1-60 min.	√	√	√	120
ERV-08	Adjustable	On Delay MultifunctionTimer	T1-Din	0.1 sec.-100 hours	√	√	√	120
ERV-03G	Adjustable	Off Delay Timer	T1-Din	0.1-3 sec.	√	√	√	120
ERV-06G	Adjustable	Off Delay Timer	T1-Din	0.1-6 sec.	√	√	√	120
ERV-12G	Adjustable	Off Delay Timer	T1-Din	0.1-12 sec.	√	√	√	120
ERV-30G	Adjustable	Off Delay Timer	T1-Din	0.1-30 sec.	√	√	√	120
ERV-60G	Adjustable	Off Delay Timer	T1-Din	0.1-60 sec.	√	√	√	120
ERV-03DG	Adjustable	Off Delay Timer	T1-Din	0.1-3 min.	√	√	√	120
ERV-06DG	Adjustable	Off Delay Timer	T1-Din	0.1-6 min.	√	√	√	120
ERV-12DG	Adjustable	Off Delay Timer	T1-Din	0.1-12 min.	√	√	√	120
ERV-30DG	Adjustable	Off Delay Timer	T1-Din	0.1-30 min.	√	√	√	120
ERV-60DG	Adjustable	Off Delay Timer	T1-Din	0.1-60 min.	√	√	√	120
ERV-08G	Adjustable	Off Delay MultifunctionTimer	T1-Din	0.1 sec.-100 hours	√	√	√	120
DRV-01	Digital	On Delay Timer	T1-Din	0.0-9.9 sec.	√	√	√	120
DRV-01D	Digital	On Delay Timer	T1-Din	0.0-9.9 min.	√	√	√	120
DRV-01H	Digital	On Delay Timer	T1-Din	0.0-9.9 hours	√	√	√	120
DRV-02	Digital	On Delay Timer	T1-Din	0-99 sec.	√	√	√	120
DRV-02D	Digital	On Delay Timer	T1-Din	0-99 min.	√	√	√	120
DRV-02H	Digital	On Delay Timer	T1-Din	0-99 hours	√	√	√	120
DRV-08	Digital	On Delay MultifunctionTimer	T1-Din	0.0 sec.-100 hours	√	√	√	120
DRV-01M	Digital	Off Delay Timer	T1-Din	0.0-9.9 sec.	√	√	√	120
DRV-01DM	Digital	Off Delay Timer	T1-Din	0.0-9.9 min.	√	√	√	120
DRV-01HM	Digital	Off Delay Timer	T1-Din	0.0-9.9 hours	√	√	√	120
DRV-02M	Digital	Off Delay Timer	T1-Din	0-99 sec.	√	√	√	120
DRV-02DM	Digital	Off Delay Timer	T1-Din	0-99 min.	√	√	√	120
DRV-02HM	Digital	Off Delay Timer	T1-Din	0-99 hours	√	√	√	120
DRV-08M	Digital	Off Delay MultifunctionTimer	T1-Din	0.0 sec.-100 hours	√	√	√	120

Note: Other voltages are also available.



ST3PA-D



DRS-08



QM4H-2Z

Single Function Time Relays

Product Code	Mode	Explanation	Time Range	Relay out	8 Pin Type	14 Pin Type	Pcs. / Carton
ST3P A-A	Adjustable	On Delay Timer	0-5 sec. / 0-0.5 sec. / 0-3 min. / 0-30 sec.	2NO;2NC	√		100
ST3P A-B	Adjustable	On Delay Timer	0-10 sec. / 0-1 sec. / 0-6 min. / 0-60 min.	2NO;2NC	√		100
ST3P A-C	Adjustable	On Delay Timer	0-5 sec. / 0-50 sec. / 0-5 min. / 0-30 min.	2NO;2NC	√		100
ST3P A-D	Adjustable	On Delay Timer	0-100 sec. / 0-10 sec. / 0-60 min. / 0-10min.	2NO;2NC	√		100
ST3P A-E	Adjustable	On Delay Timer	0-10 min. / 0-60 sec. / 0-6 hours / 0-60min.	2NO;2NC	√		100
ST3P A-F	Adjustable	On Delay Timer	0-20 min. / 0-2 min. / 0-12 hours / 0-2 hours	2NO;2NC	√		100
ST3P A-G	Adjustable	On Delay Timer	0-40 min. / 0-4 min. / 0-24 hours / 0-4 hours	2NO;2NC	√		100
DRS-08-2N	Digital	On Delay Timer	0.1 sec. - 990 hours	2NO;2NC	√		100
DRS-08-4N	Digital	On Delay Timer	0.1 sec. - 990 hours	4NO;4NC		√	100
QM4H-2Z	Digital	On Delay Timer	0.01S - 99H99M	2NO;2NC	√		100



ERS-07



ERV-YU

Control Relays

Product Code	Mode	Explanation	Time Range	Rail Type	Pcs. / Carton
ERS-07	Adjustable	Multi-Function Dual Adjustable Right Left Relay	ON (Right-Left) Time Interval: 1 sec. - 100 min. / OFF (Intermediate Wait) Time Interval: 1 sec. - 100 min.	√	120
ERV-YU	Adjustable	Star Delta Time Relay	Star: 1 sec. - 30 sec., Transition: 10 msec. - 500 msec.	√	120
ERV-ST	Adjustable	Start-Stop Relay	Start and stop	√	120



ERX-10



ERX-20



MCB-10



DRV-10



QM4H-1Z

Functional Time Relays

Product Code	Mode	Explanation	220V AC	24-240V AC/DC	Rail Type	Pin type	Pcs. / Carton
ERX-10	Adjustable	10 Functions Timer	√		√		120
ERX-20	Adjustable	10 Functions Timer	√	√	√		120
DRV-10	Digital	ON or OFF Delay Timer	√		√		120
MCB-10	Digital	10 Functions Timer	√		√		120
MCB-20	Digital	10 Functions Timer	√	√	√		120
QM4H-1Z	Digital	With pause and reset Function Timer	√			√	100

Note: Other voltages are also available



ERV-09



DRV-09



QM4H-S

Multifunction Flasher Relays

Product Code	Mode	Explanation	Time Range	Rail Type	8 Pin Type	Pcs. / Carton
ERV-09	Adjustable	Multifunction Flasher Relay	On: 1-100s. Off: 1-100s.	√		120
DRV-09	Digital	Digital Multifunction Flasher Relay	On: 0.1 hrs.-100 day. Off: 0.1 hrs.-100 day.	√		120
DRV-09D	Digital	Digital Multifunction Flasher Relay	0.1 sec.-99 min.	√		120
QM4H-S	Digital	Digital Multifunction Flasher Relay	0.1 sec.-99 hours.		√	100

Energy Analyzer & Multimeter

"Accurate power monitoring and smart analysis—
your reliable partner in energy"



SDM-AVF96



SDM-AVF109



SDM-AVF209

Multimeter

Product Code	Explanation	1 x Voltage (V)	1 x Current (A)	1 x Frequency (Hz)	3x20 mm Led Display	3x19 mm Led Display	X/5	CT-60	CT-120	CT-300	Panel Type (96 x 96)	Panel Type (72 x 72)	Pcs. / Carton
SDM-AVF96	Multimeter	√	√	√	√		√				√		60
SDM-AVF96D	Multimeter	√	√	√	√			√			√		30
SDM-AVF109	Multimeter	√	√	√	√				√		√		30
SDM-AVF209	Multimeter	√	√	√	√					√	√		30
SDM-AVF72	Multimeter	√	√	√		√	√					√	60
SDM-AVF72D	Multimeter	√	√	√		√		√				√	30
SDM-AVF107	Multimeter	√	√	√		√			√			√	30
SDM-AVF207	Multimeter	√	√	√		√				√		√	30



EM-07E



EM-07-250D



EM-07E-60D



EM-07E-60D-DIN



EM-07-250D-DIN

Multimeter

Product Code	Explanation	3 x Voltage (Phase-Neutral-V)	3 x Voltage (Phase-Phase-Neutral)	3 x Current (A)	3 x Frequency (Hz)	Apparent Power	RS-485 Communication	3.7" LCD Window	2.5" LCD Window	6x9 mm Led Display	6x7.2 mm Led Display	High-Low Voltage Protection	High-Low Current Protection	Phase Sequence	Phase Sequence Protection	Voltage Asymmetry Protection	Current Asymmetry Protection	Demand Time	Demand Multiplier	High-Low Frequency Protection	X/5	CT-60	CT-120	CT-300	Contact Output	150-260VAC Power Supply	85-240VAC Power Supply	Panel Type (96 x 96)	Rail Type (DIN)	Pcs. / Carton	
EM-06	Multimeter	√	√	√	√					√				√								√					√	√		60	
EM-60D	Multimeter	√	√	√	√					√				√									√					√	√		30
EM-100D	Multimeter	√	√	√	√					√				√									√					√	√		30
EM-250D	Multimeter	√	√	√	√					√				√										√				√	√		30
SEM-06	Multimeter	√	√	√	√					√				√								√					√	√		60	
SEM-60D	Multimeter	√	√	√	√					√				√									√				√	√		30	
SEM-100D	Multimeter	√	√	√	√					√				√									√				√	√		30	
SEM-250D	Multimeter	√	√	√	√					√				√										√			√	√		30	
EM-06-DIN	Multimeter	√	√	√	√						√			√								√					√	√		60	
EM-60D-DIN	Multimeter	√	√	√	√						√			√									√				√	√		30	
EM-100D-DIN	Multimeter	√	√	√	√						√			√									√				√	√		30	
EM-250D-DIN	Multimeter	√	√	√	√						√			√										√			√	√		30	
EM-07	Multimeter	√	√	√	√	√	√	√				√	√	√	√	√	√	√	√	√	√	√			√			√		60	
EM-07-60D	Multimeter	√	√	√	√	√	√	√				√	√	√	√	√	√	√	√	√	√	√	√		√			√		30	
EM-07-100D	Multimeter	√	√	√	√	√	√	√				√	√	√	√	√	√	√	√	√	√	√	√	√		√		√		30	
EM-07-250D	Multimeter	√	√	√	√	√	√	√				√	√	√	√	√	√	√	√	√	√	√	√	√		√		√		30	
EM-07-DIN	Multimeter	√	√	√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√	√		√			√	60	
EM-07-60D-DIN	Multimeter	√	√	√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√	√		√			√	30	
EM-07-100D-DIN	Multimeter	√	√	√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√	√		√			√	30	
EM-07-250D-DIN	Multimeter	√	√	√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√	√		√			√	30	
EM-07E	Multimeter	√	√	√	√	√	√	√						√								√						√		60	
EM-07E-60D	Multimeter	√	√	√	√	√	√	√						√									√					√		30	
EM-07E-100D	Multimeter	√	√	√	√	√	√	√						√										√				√		30	
EM-07E-250D	Multimeter	√	√	√	√	√	√	√						√										√				√		30	
EM-07E-DIN	Multimeter	√	√	√	√	√	√	√	√					√								√							√	60	
EM-07E-60D-DIN	Multimeter	√	√	√	√	√	√	√	√					√									√						√	30	
EM-07E-100D-DIN	Multimeter	√	√	√	√	√	√	√	√					√										√					√	30	
EM-07E-250D-DIN	Multimeter	√	√	√	√	√	√	√	√					√										√					√	30	



TPM-01ES



TPM-01ES-250D



TPM-04



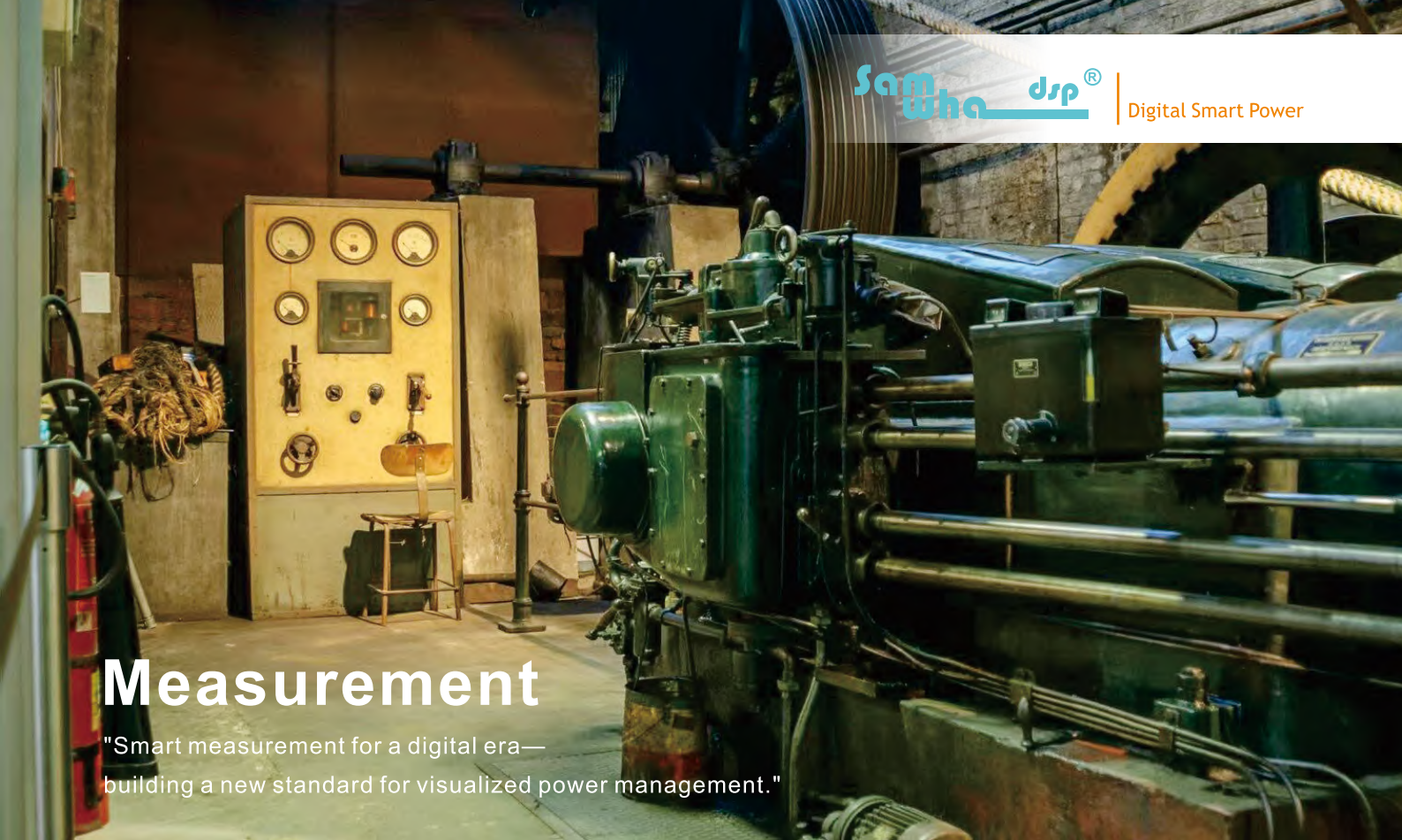
TPM-04SH



TPM-04-100D-DIN

Energy Analyzer

Product Code	Explanation	3 x Voltage (Phase-Neutral-V)	3 x Voltage (Phase-Phase-Neutral)	3 x Current (A)	3 x Frequency (Hz)	3 x Cos φ	Power Factor (PF1, PF2, PF3)	Active Power (P1, P2, P3, PΣ)	Reactive Power (Q1, Q2, Q3, QΣ)	Apparent Power (S1, S2, S3, SΣ)	Demand	Maximum Values (Max)	Minimum Values (Min)	Mean Values (Mean)	Current/voltage Imbalance	% THD I	% THD V	2-31. Harmonic (V)	2-31. Harmonic (I)	RS-485 Communication	1 Digital Input	1 Relay Output	2 Relay Output	7 Segment LED Display	3.7" Glass LCD	2.5" Glass LCD	RS-485 Communication	Panel Type (96 x 96)	Rail Type (DIN)	Pcs. / Carton
TPM-01E	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√									√			√		60		
TPM-01E-60D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√									√			√		60		
TPM-01E-100D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√									√			√		60		
TPM-01E-250D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√									√			√		60		
TPM-01ES	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ES-60D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ES-100D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ES-250D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ESH	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ESH-60D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ESH-100D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-01ESH-250D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√	60		
TPM-04	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√		√	√	60		
TPM-04-60D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√		√	√	30		
TPM-04-100D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√		√	√	30		
TPM-04-250D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√		√	√	30		
TPM-04-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	60	
TPM-04-60D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	
TPM-04-100D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	
TPM-04-250D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	
TPM-04SH	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√		√	√	60		
TPM-04SH-60D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√		√	√	30		
TPM-04SH-100D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√		√	√	30		
TPM-04SH-250D	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		√	√		√	√	30		
TPM-04SH-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	60	
TPM-04SH-60D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	
TPM-04SH-100D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	
TPM-04SH-250D-DIN	Energy Analyzer	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	30	



Measurement

"Smart measurement for a digital era—
building a new standard for visualized power management."



SDM-V96T



SDM-V96S



SDM-V96



DV-DIN

Volmeter

Product Code	Explanation	Dimensions (mm)	Display	3 x Voltage (Phase - Neutral)	3 x Voltage (Phase - Phase)	Panel Type	Rail Type	Pcs. / Carton
SDM-V96T	Digital 3 Phase Voltmeter 5V - 500V AC (50/60 Hz)	96x96	3x20mm	√	√	√		60
SDM-V72T	Digital 3 Phase Voltmeter 5V - 500V AC (50/60 Hz)	72x72	3x19mm	√	√	√		100
SDM-V96S	Digital Selective Voltmeter 5V - 500V AC (50/60 Hz)	96x96	1x20mm	√	√	√		60
SDM-V72S	Digital Selective Voltmeter 5V - 500V AC (50/60 Hz)	72x72	1x14mm	√	√	√		100
SDM-V96	Digital Voltmeter 1V - 500V AC (50/60 Hz)	96x96	3x20 mm			√		60
SDM-V72	Digital Voltmeter 1V - 500V AC (50/60 Hz)	72x72	1x14mm			√		100
SDM-V48	Digital Voltmeter 1V - 500V AC (50/60 Hz)	48x48	1x9mm			√		100
SDM-V36	Digital Voltmeter 1V - 500V AC (50/60 Hz)	36x96	1x14mm			√		100
DV-DIN	Digital Voltmeter 1V - 500V AC (50/60 Hz)	T1-Din	1x9mm				√	120



DA-VIP04



SDM-A96T



SDM-A96TD



SDM-A96



DA-60

Ammeter

Product Code	Explanation	Dimensions (mm)	Display	Panel Type	Rail Type	Relay Type	X/5	CT-60	CT-120	CT-300	High Current Protection	Contact Output	Pcs. / Carton
DA-VIP04	Digital Set Ammeter (50/60 Hz)	96x96	1x20mm, 1x14mm	√		√	√				√	√	60
SDM-A96T	Digital 3 Phase Ammeter (50/60 Hz)	96x96	3x14mm	√			√						60
SDM-A96TD	Digital 3 Phase Ammeter (50/60 Hz)	96x96	3x14mm	√				√					30
SDM-A109T	Digital 3 Phase Ammeter (50/60 Hz)	96x96	3x14mm	√					√				30
SDM-A209T	Digital 3 Phase Ammeter (50/60 Hz)	96x96	3x14mm	√						√			30
SDM-A72T	Digital 3 Phase Ammeter (50/60 Hz)	72x72	3x14mm	√			√						100
SDM-A72TD	Digital 3 Phase Ammeter (50/60 Hz)	72x72	3x14mm	√				√					50
SDM-A107T	Digital 3 Phase Ammeter (50/60 Hz)	72x72	3x14mm	√					√				50
SDM-A207T	Digital 3 Phase Ammeter (50/60 Hz)	72x72	3x14mm	√						√			50
SDM-A72	Digital Ammeter (50/60 Hz)	72x72	1x14mm	√			√						100
SDM-A72D	Digital Ammeter (50/60 Hz)	72x72	1x14mm	√				√					50
SDM-A107	Digital Ammeter (50/60 Hz)	72x72	1x14mm	√					√				50
SDM-A207	Digital Ammeter (50/60 Hz)	72x72	1x14mm	√						√			50
SDM-A48	Digital Ammeter (50/60 Hz)	48x48	1x9mm	√			√						100
SDM-A48D	Digital Ammeter (50/60 Hz)	48x48	1x9mm	√				√					50
SDM-A104	Digital Ammeter (50/60 Hz)	48x48	1x9mm	√					√				50
SDM-A204	Digital Ammeter (50/60 Hz)	48x48	1x9mm	√						√			50
SDM-A36	Digital Ammeter (50/60 Hz)	36x96	1x14mm	√			√						100
SDM-A36D	Digital Ammeter (50/60 Hz)	36x96	1x14mm	√				√					50
SDM-A103D	Digital Ammeter (50/60 Hz)	36x96	1x14mm	√					√				50
SDM-A203D	Digital Ammeter (50/60 Hz)	36x96	1x14mm	√						√			50
DA-60	Digital Ammeter (50/60 Hz)	T1-Din	1x9mm		√			√					120
DA-100D	Digital Ammeter (50/60 Hz)	T1-Din	1x9mm		√				√				120
DA-250D	Digital Ammeter (50/60 Hz)	T1-Din	1x9mm		√					√			120



SDM-F96



SDM-F72



DF-DIN

Frequency meter

Product Code	Explanation	Dimensions (mm)	Display	Panel Type	Rail Type	Pcs. / Carton
SDM-F96	Digital Frequency Meter	96x96	1x20mm	√		60
SDM-F72	Digital Frequency Meter	72x72	1x14mm	√		100
SDM-F48	Digital Frequency Meter	48x48	1x9mm	√		100
SDM-F36	Digital Frequency Meter	36x96	1x14mm	√		100
DF-DIN	Digital Frequency Meter	V-T2	1x9mm		√	120



DAV-72



DAV-60



DAV-250

Voltmeter & Ammeter

Product Code	Explanation	Dimensions (mm)	Display	Panel Type	Rail Type	X/5	CT-60	CT-120	CT-300	Pcs. / Carton
DAV-96	Digital Voltmeter & Ammeter (50/60 Hz)	96x96	2x20mm	√		√				60
DAV-96D	Digital Voltmeter & Ammeter (50/60 Hz)	96x96	2x20mm	√			√			60
DAV-109D	Digital Voltmeter & Ammeter (50/60 Hz)	96x96	2x20mm	√				√		30
DAV-209D	Digital Voltmeter & Ammeter (50/60 Hz)	96x96	2x20mm	√					√	30
DAV-72	Digital Voltmeter & Ammeter (50/60 Hz)	72x72	2x14mm	√		√				30
DAV-72D	Digital Voltmeter & Ammeter (50/60 Hz)	72x72	2x14mm	√			√			100
DAV-107D	Digital Voltmeter & Ammeter (50/60 Hz)	72x72	2x14mm	√				√		50
DAV-207D	Digital Voltmeter & Ammeter (50/60 Hz)	72x72	2x14mm	√					√	50
DAV-DIN	Digital Voltmeter & Ammeter (50/60 Hz)	T2-Din	2x9mm		√					120
DAV-60D	Digital Voltmeter & Ammeter (50/60 Hz)	T2-Din	2x9mm		√					120
DAV-100D	Digital Voltmeter & Ammeter (50/60 Hz)	T2-Din	2x9mm		√					60
DAV-250D	Digital Voltmeter & Ammeter (50/60 Hz)	T2-Din	2x9mm		√					60



Protection and Control Relays

“Smart Protection, Intelligent Control.”



SSR-05



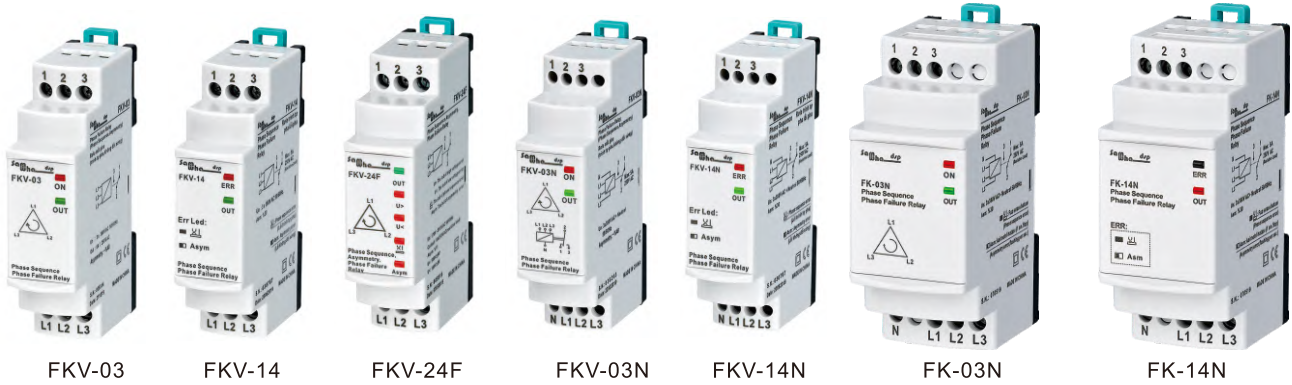
VSR-05



SSE-10

Liquid Level Relays

Product Code	Explanation	Time Range	220V AC (50/60 Hz)	<100k Sensitivity adjustment	Pcs. / Carton
SSR-05	Liquid Level Relay	On: 1-100s. Off: 1-100s.	√	√	50
VSR-05	Liquid Level Relay	On: 0.1 hrs.-100 day. Off: 0.1 hrs.-100 day.	√	√	120
SSE-10	Level electrode probes	0.1 sec.-99 min.	√		400



Phase Failure Relays

Product Code	Explanation	Dimensions (mm)	High - Low Voltage Protection	Absence of Phase	Phase Sequence	Asymmetry Protection %11 (Fixed)	Asymmetry Protection %30 (Fixed)	Asymmetry Protection %40 (Fixed)	Rail Type	Pcs. / Carton
FKV-03	Phase (Motor) Protection Relay	T1-Din		√	√			√	√	120
FKV-11	Phase (Motor) Protection Relay	T1-Din		√			√		√	120
FKV-12	Phase (Motor) Protection Relay	T1-Din		√				√	√	120
FKV-14	Phase (Motor) Protection Relay	T1-Din		√	√		√		√	120
FKV-24F	Phase (Motor) Protection Relay	T1-Din	√	√	√	√			√	120
FKV-03N	Phase (Motor) Protection Relay	T1-Din		√	√			√	√	120
FKV-11N	Phase (Motor) Protection Relay	T1-Din		√			√		√	120
FKV-12N	Phase (Motor) Protection Relay	T1-Din		√				√	√	120
FKV-14N	Phase (Motor) Protection Relay	T1-Din		√	√		√		√	120
FK-01	Phase (Motor) Protection Relay	T0-Din		√			√		√	50
FK-02	Phase (Motor) Protection Relay	T0-Din		√				√	√	50
FK-03	Phase (Motor) Protection Relay	T2-Din		√	√			√	√	120
FK-11	Phase (Motor) Protection Relay	T2-Din		√			√		√	120
FK-12	Phase (Motor) Protection Relay	T2-Din		√				√	√	120
FK-14	Phase (Motor) Protection Relay	T2-Din		√	√		√		√	120
FK-24F	Phase (Motor) Protection Relay	T2-Din	√	√	√	√			√	120
FK-03N	Phase (Motor) Protection Relay	T2-Din		√	√			√	√	120
FK-11N	Phase (Motor) Protection Relay	T2-Din		√			√		√	120
FK-12N	Phase (Motor) Protection Relay	T2-Din		√				√	√	120
FK-14N	Phase (Motor) Protection Relay	T2-Din		√	√		√		√	120



FKM-05F



FK-15



FK-05F

Phase Failure Relays

Product Code	Explanation	Dimensions (mm)	High - Low Voltage Protection	Absence of Phase	Phase Sequence	Asymmetry Protection %/5-°25	Reset time	Rail Type	Pcs. / Carton
FKM-05	Phase (Motor) Protection Relay	T2-Din	√	√		√	√	√	120
FKM-05F	Phase (Motor) Protection Relay	T2-Din	√	√	√	√	√	√	120
FK-15	Phase (Motor) Protection Relay	T2L-Din	√	√		√	√	√	120
FK-15F	Phase (Motor) Protection Relay	T2L-Din	√	√	√	√	√	√	120
FK-05	Phase (Motor) Protection Relay	T0-Din	√	√		√	√	√	50
FK-05F	Phase (Motor) Protection Relay	T0-Din	√	√	√	√	√	√	50



DGK-01W



DGK-04F



DGS-04



DGS-04F

Digital Voltage Control Relay

Product Code	Explanation	Dimensions (mm)	With Neutral	Without Neutral	High Voltage Protection	Low Voltage Protection	Absence of Phase	Phase Sequence	Reset Time	Error Waiting Time	Rail Type	8 Pin Type	Pcs. / Carton
DGK-01	Digital Mono Phase Voltage Control Relay		√		√ (230-280VAC)	√ (150-210VAC)			√	√	√		120
DGK-01W	Digital Mono Phase Voltage Control Relay		√		√	√ (110-210VAC)			√	√	√		120
DGK-01C	Digital Mono Phase Voltage Control Relay		√		√	√ (110-210VAC)			√(0.1-60 sec.)	√ (Fixed 3 sec.)	√		120
DGK-03	Digital Three Phase Voltage Control Relay	V1-Din		√	√		√		√	√	√		50
DGK-04	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√		√	√	√		50
DGK-04P	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√		√	√	√		50
DGK-04F	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√	√		50
DGK-04PF	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√	√		50
DGS-03	Digital Three Phase Voltage Control Relay	V1-Din		√	√		√		√	√		√	50
DGS-04	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√		√	50
DGS-04F	Digital Three Phase Voltage Control Relay	V1-Din		√	√	√	√		√	√		√	50



FKV-03N



FKV-14ND



FKV-03HF



FKV-53HF



DFK-05F



DFS-05

Digital Phase Failure Relays

Product Code	Explanation	Dimensions (mm)	With Neutral	Without Neutral	High - Low Voltage Protection	Absence of Phase	Phase Sequence	Asymmetry Protection (11% Fixed)	Asymmetry Protection (20% Fixed)	Asymmetry Protection (30% Fixed)	Asymmetry Protection (40% Fixed)	Asymmetry Protection %5-%20	Asymmetry Protection %5-%50	9 Digits 9 mm Display	Rail Type	8 Pin Type	Pcs. / Carton
FKD-01	Digital Phase (Motor) Protection Relay	T2-Din	√	√	√			√						√	√		120
FKD-01F	Digital Phase (Motor) Protection Relay	T2-Din	√	√	√	√		√						√	√		120
DFK-05	Digital Phase (Motor) Protection Relay	T0-Din	√	√	√							√		√	√		120
DFK-05F	Digital Phase (Motor) Protection Relay	T0-Din	√	√	√	√						√		√	√		120
DFS-01	Digital Phase (Motor) Protection Relay	E0	√	√	√			√						√		√	50
DFS-01F	Digital Phase (Motor) Protection Relay	E0	√	√	√	√		√						√		√	50
DFS-05	Digital Phase (Motor) Protection Relay	E0	√	√	√							√		√		√	50
DFS-05F	Digital Phase (Motor) Protection Relay	E0	√	√	√	√						√		√		√	50
FKV-03D	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√					√			√	√		120
FKV-11D	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√				√					√	√		120
FKV-12D	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√					√				√	√		120
FKV-14D	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√			√					√	√		120
FKV-24D	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√	√							√	√		120
FKV-04H	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√								√	√	√		120
FKV-04HF	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√								√	√	√		120
FKV-03ND	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√					√			√	√		120
FKV-11ND	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√				√					√	√		120
FKV-12ND	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√					√				√	√		120
FKV-14ND	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√			√					√	√		120
FKV-24ND	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√	√							√	√		120
FKV-04NH	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√								√	√	√		120
FKV-04NHF	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√							√	√	√		120
FKV-53H (3x220VAC)	Digital Phase (Motor) Protection Relay	T1N-Din		√	√	√								√	√	√	120
FKV-53HF (3x220VAC)	Digital Phase (Motor) Protection Relay	T1N-Din		√	√	√	√							√	√	√	120
FKV-53NH (3x220VAC+N)	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√									√	√	√	120
FKV-53NHF (3x220VAC+N)	Digital Phase (Motor) Protection Relay	T1N-Din	√	√	√	√								√	√	√	120



UVR-01



UVR-21



GKV-12F



GKT-03F



GK-14F



GK-04F

Voltage Control Relay

Product Code	Explanation	Dimensions (mm)	With Neutral	Without Neutral	High Voltage Protection	Low Voltage Protection	High Voltage Fuse (Electronic)	Low Voltage Fuse (Electronic)	Power Supply Failure Protection	Absence of Phase	Phase Sequence	Reset Time	Error Waiting Time	Rail Tipi	Pcs. / Carton
UVR-01	Mono Phase Voltage Control Relay	V1-Din	√			√				√		√		√	120
UVR-21	Three Phase Voltage Control Relay	V1-Din	√			√				√		√		√	120
UVR-11	Mono Phase Voltage Control Relay	V1-Din	√		√	√				√		√	√	√	120
GKV-12	Three Phase Voltage Control Relay	V1-Din	√		√	√				√		√	√	√	120
GKV-12F	Three Phase Voltage Control Relay	V1-Din	√		√	√	√	√	√	√	√	√	√	√	120
GKV-13	Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√		√	√	√	120
GKV-13F	Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√	√	√	√	√	120
GKV-15	Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√		√	√	√	120
GKV-15F	Three Phase Voltage Control Relay	V1-Din		√	√	√	√	√	√	√	√	√	√	√	120
GKM-11	Mono Phase Voltage Control Relay	T2-Din	√		√	√				√		√	√	√	120
GKM-02	Three Phase Voltage Control Relay	T2-Din	√		√	√	√	√	√	√		√	√	√	120
GKM-02F	Three Phase Voltage Control Relay	T2-Din	√		√	√	√	√	√	√	√	√	√	√	120
GKT-03	Three Phase Voltage Control Relay	T2-Din		√	√	√	√	√	√	√		√	√	√	120
GKT-03F	Three Phase Voltage Control Relay	T2-Din		√	√	√	√	√	√	√	√	√	√	√	120
GKT-05	Three Phase Voltage Control Relay	T2-Din		√	√	√	√	√	√	√		√	√	√	120
GKT-05F	Three Phase Voltage Control Relay	T2-Din	√		√	√	√	√	√	√	√	√	√	√	120
GK-12N	Three Phase Voltage Control Relay	T2L-Din	√			√				√		√	√	√	50
GK-13N	Three Phase Voltage Control Relay	T2L-Din	√		√					√		√	√	√	50
GK-14N	Three Phase Voltage Control Relay	T2L-Din	√		√	√				√		√	√	√	50
GK-14FN	Three Phase Voltage Control Relay	T2L-Din	√		√	√				√	√	√	√	√	50
GK-12	Three Phase Voltage Control Relay	T2L-Din		√		√				√		√	√	√	50
GK-13	Three Phase Voltage Control Relay	T2L-Din		√	√					√	√	√	√	√	50
GK-14	Three Phase Voltage Control Relay	T2L-Din		√	√	√				√		√	√	√	50
GK-14F	Three Phase Voltage Control Relay	T2L-Din		√	√	√				√	√	√	√	√	50
GK-02N	Three Phase Voltage Control Relay	T0-Din	√			√				√		√	√	√	50
GK-03N	Three Phase Voltage Control Relay	T0-Din	√		√					√		√	√	√	50
GK-04N	Three Phase Voltage Control Relay	T0-Din	√		√	√				√		√	√	√	50
GK-04FN	Three Phase Voltage Control Relay	T0-Din	√		√	√				√	√	√	√	√	50
GK-02	Three Phase Voltage Control Relay	T0-Din		√		√				√		√	√	√	50
GK-03	Three Phase Voltage Control Relay	T0-Din		√	√					√		√	√	√	50
GK-04	Three Phase Voltage Control Relay	T0-Din		√	√	√				√		√	√	√	50
GK-04F	Three Phase Voltage Control Relay	T0-Din		√	√	√				√	√	√	√	√	50



SOPR-SS1 series



SOPR-SS2 series



SOPR-SS3 series



SOPR-SP series



SOPR-EP series



AKR-03D



AKR-60D



EOCRSS-E series



EOCRSE-E series



EOCRDS-E series



EOCRDS-P series



EOCRSS-S series



EOCRSE2-S series



EOCRDS3-S series



EOCRDS3-P series



EOCRAR series



EOCRSS-P series

Electronic Overload Control Relays

Product Code	Mode	Explanation	Start Delay	Error Waiting Delay	Auto Reset Delay	N/R Selector Switch	Electronic Overload Protection	Phase sequence Protection(Can be Off)	Auto-reset	C. T Window-type	C. T Through-type	C. T Terminal type	180-460VAC Power Supply	24-240VAC/DC Power Supply	1C Relay Output	1a1b Relay output	X/5	CT-60	CT-120	CT-300	Rail Type	Pin Type	Pcs. / Carton
SOPR-SS1	Adjustable	Electronic Overload Control Relay	√				√		√			√									√		100
SOPR-SS2	Adjustable	Electronic Overload Control Relay	√				√				√	√									√		100
SOPR-SS3	Adjustable	Electronic Overload Control Relay	√				√				√	√									√		100
SOPR-SP	Adjustable	Electronic Overload Control Relay		√			√					√	√									√	100
SOPR-EP	Adjustable	Electronic Overload Control Relay		√			√					√	√									√	100
EOCRSS-E	Adjustable	Electronic Overload Control Relay	√				√			√		√									√		100
EOCRSE2-E	Adjustable	Electronic Overload Control Relay		√			√				√	√									√		100
EOCRDS-E	Adjustable	Electronic Overload Control Relay	√				√				√	√									√		100
EOCRDS-P	Adjustable	Electronic Overload Control Relay	√				√				√	√									√		100
EOCRSS-S	Adjustable	Electronic Overload Control Relay	√				√			√		√									√		100
EOCRSS-P	Adjustable	Electronic Overload Control Relay	√			√	√			√			√								√		100
EOCRSE2-S	Adjustable	Electronic Overload Control Relay		√			√				√		√								√		100
EOCRDS3-S	Adjustable	Electronic Overload Control Relay	√			√	√	√			√		√								√		100
EOCRDS3-P	Adjustable	Electronic Overload Control Relay	√			√	√	√			√		√								√		100
EOCRAR	Adjustable	Electronic Overload Control Relay		√	√	√	√		√	√			√								√		100
AKR-03D	Adjustable	Electronic Overload Control Relay			√		√		√			√					√				√		120
AKR-60D	Adjustable	Electronic Overload Control Relay			√		√		√			√						√			√		120
AKR-100D	Adjustable	Electronic Overload Control Relay			√		√		√			√							√		√		60
AKR-250D	Adjustable	Electronic Overload Control Relay			√		√		√			√								√	√		60

Note1: The auto-reset delay of AKR-03D, 60D, 100D, and 250D is equivalent to the error waiting delay.
 Note2: Other voltages are also available.

Digital Overload Control Relay

“Digital motor protection, powering smart industrial upgrades.”



DAKR-03



DAKR-60D



TRM-50



TRM-400



EOCR-SSD 60



SOPR-3DE-120

Digital Overload Control Relay

Product Code	Mode	Explanation	Start Delay	Error Waiting Delay	Auto Reset Delay	N/R Selector Switch	Electronic Overload Protection	Phase sequence Protection (Can be Off)	Auto-reset (Can be Off)	C.T Window-type	C.T Through-type	C.T Terminal type	220VAC Power Supply	24-240VAC/DC Power Supply	1c Relay Output	1a1b Relay output	X/5	CT-60	CT-120	CT-300	Rail Type	Pcs. / Carton
DAKR-03	Digital	Digital Overload Control Relay	√	√	√							√	√	√		√					√	120
DAKR-60D	Digital	Digital Overload Control Relay	√	√	√							√	√	√			√				√	120
DAKR-100D	Digital	Digital Overload Control Relay	√	√	√							√	√	√					√		√	60
DAKR-250D	Digital	Digital Overload Control Relay	√	√	√							√	√	√						√	√	60
TRM-03	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	50
TRM-12	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	50
TRM-25	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	50
TRM-50	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	20
TRM-100	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	20
TRM-200	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	20
TRM-300	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	20
TRM-400	Digital	Digital Overload Control Relay	√	√	√		√					√	√	√							√	20
SOPR-3DE	Digital	Digital Overload Control Relay	√	√		√	√			√		√	√	√	√						√	100
EOCRSSD	Digital	Digital Overload Control Relay	√	√	√	√	√		√				√	√	√	√					√	100

Note1: The auto-reset delay of DAKR-03D, 60D, 100D, and 250D is equivalent to the error waiting delay.

Note2: Other voltages are also available.

Current & Voltage Protector

Smart protection module—guarding safe and stable power circuits.



ATR-80

Automatic Phase Changeover Relay

Product Code	Explanation	Dimensions (mm)	With Neutral	Knob Setting Type	Menu Setting Type	Rated Current(In) 63A	Rated Current(In) 80A	Rated Current(In) 100A	High Voltage Protection	Low Voltage Protection	Over-Current Protection	Rail Type	Pcs. / Carton
ATR-63	Automatic Phase Changeover Relay	H4-DIN	√	√		√			√	√		√	60
ATR-80	Automatic Phase Changeover Relay	H4D-DIN	√	√			√		√	√		√	60
ATR-100	Automatic Phase Changeover Relay	H4D-DIN	√	√				√	√	√		√	60
ATR-63S	Automatic Phase Changeover Relay	H4-DIN	√	√		√			√	√	√	√	60
ATR-80S	Automatic Phase Changeover Relay	H4D-DIN	√	√			√		√	√	√	√	60
ATR-100S	Automatic Phase Changeover Relay	H4D-DIN	√	√				√	√	√	√	√	60
ATR-KT-63	Automatic Phase Changeover Relay	H4-DIN	√		√	√			√	√	√	√	60
ATR-KT-80	Automatic Phase Changeover Relay	H4D-DIN	√		√		√		√	√	√	√	60
ATR-KT-100	Automatic Phase Changeover Relay	H4D-DIN	√		√			√	√	√	√	√	60



VR-40



AVR-63



AVR-63S



AVR-100T



AVR-KT-100T



AVR-3S-80A

Current & Voltage Protector

Product Code	Explanation	Dimensions (mm)	With Neutral	High Voltage Protection	Low Voltage Protection	Low Voltage Fuse Protection	Over-Current Protection	Auto Reset (Voltage Failure)	Three-phase synchronization	Three Phase Independent	Phase Sequence Protection	Energy metering	Rail Type	Pcs. / Carton
VR-40	Mono Phase Voltage Protector	H1-DIN	√	√	√	√		√					√	120
VR-60	Mono Phase Voltage Protector	H1-DIN	√	√	√	√		√					√	120
AVR-40	Mono Phase Current & Voltage Protector	H1-DIN	√	√	√	√	√	√					√	120
AVR-63	Mono Phase Current & Voltage Protector	H1-DIN	√	√	√	√	√	√					√	120
AVR-40S	Mono Phase Current & Voltage Protector	H1-DIN	√	√	√	√	√	√				√	√	120
AVR-63S	Mono Phase Current & Voltage Protector	H1-DIN	√	√	√	√	√	√				√	√	120
AVR-63T	Three Phase Current & Voltage Protector	H4-DIN	√	√	√	√	√	√	√				√	60
AVR-80T	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√				√	60
AVR-100T	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√				√	60
AVR-63TF	Three Phase Current & Voltage Protector	H4-DIN	√	√	√	√	√	√	√		√		√	60
AVR-80TF	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√		√		√	60
AVR-100TF	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√		√		√	60
AVR-KT-63A	Three Phase Current & Voltage Protector	H4-DIN	√	√	√	√	√	√	√				√	60
AVR-KT-80A	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√				√	60
AVR-KT-100A	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√	√				√	60
AVR-3S-63A	Three Phase Current & Voltage Protector	H4-DIN	√	√	√	√	√	√		√			√	60
AVR-3S-80A	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√		√			√	60
AVR-3S-100A	Three Phase Current & Voltage Protector	H4D-DIN	√	√	√	√	√	√		√			√	60

Contactor & Thermal Relay

Classic combo, control + protection—built for reliable motor systems.



MC 9



MC 22



MC 40



MC 65



MC 85

Contactor

Product Code	Explanation	Rated Power(kW) Rated Current(A) <AC-3>	Conventional Free Air Thermal Current(Ith)	Auxiliary Contacts	Matching Thermal Relay	Matching Pin Type Electronic Overload Control Relay	Pcs. / Carton
MC 9	AC 3 Pole Contactor	4kW / 9A	25A	1NO,1NC	TH-22	SOPR-SP	30
MC 12	AC 3 Pole Contactor	5.5kW / 12A	25A	1NO,1NC	TH-22	SOPR-SP	30
MC 18	AC 3 Pole Contactor	7.5kW / 18A	40A	1NO,1NC	TH-22	SOPR-SP	30
MC 22	AC 3 Pole Contactor	11kW / 22A	40A	1NO,1NC	TH-22	SOPR-SP	30
MC 32	AC 3 Pole Contactor	15kW / 32A	50A	2NO,2NC	TH-40	SOPR-EP	20
MC 40	AC 3 Pole Contactor	18.5kW / 40A	60A	2NO,2NC	TH-40	SOPR-EP	20
MC 48	AC 3 Pole Contactor	18.5kW / 45A	65A	2NO,2NC	TH-40	SOPR-EP	20
MC 50	AC 3 Pole Contactor	22kW / 50A	70A	2NO,2NC	TH-65	SOPR-EP	10
MC 65	AC 3 Pole Contactor	30kW / 65A	100A	2NO,2NC	TH-65	/	10
MC 75	AC 3 Pole Contactor	37kW / 75A	110A	2NO,2NC	TH-100	/	10
MC 85	AC 3 Pole Contactor	45kW / 85A	135A	2NO,2NC	TH-100	/	10
MC 100	AC 3 Pole Contactor	55kW / 105A	160A	2NO,2NC	TH-100	/	10



TH22



TH40



TH100

Thermal Relay

Product Code	Explanation	Current Adjustable Range (A)	Matching AC Contactor	Trip Class	Rated Voltage (Ue)	Pcs./ Carton
TH-22-0.14	Thermal Relay	0.1-0.16A	MC 9-22	10A	AC 380/660V	100
TH-22-0.21	Thermal Relay	0.16-0.25A	MC 9-22	10A	AC 380/660V	100
TH-22-0.33	Thermal Relay	0.25-0.4A	MC 9-22	10A	AC 380/660V	100
TH-22-0.52	Thermal Relay	0.4-0.63A	MC 9-22	10A	AC 380/660V	100
TH-22-0.82	Thermal Relay	0.63-1A	MC 9-22	10A	AC 380/660V	100
TH-22-1.3	Thermal Relay	1-1.6A	MC 9-22	10A	AC 380/660V	100
TH-22-2.1	Thermal Relay	1.6-2.5A	MC 9-22	10A	AC 380/660V	100
TH-22-3.3	Thermal Relay	2.5-4A	MC 9-22	10A	AC 380/660V	100
TH-22-5	Thermal Relay	4-6A	MC 9-22	10A	AC 380/660V	100
TH-22-6.5	Thermal Relay	5-8A	MC 9-22	10A	AC 380/660V	100
TH-22-7.5	Thermal Relay	6-9A	MC 9-22	10A	AC 380/660V	100
TH-22-8.5	Thermal Relay	7-10A	MC 9-22	10A	AC 380/660V	100
TH-22-11	Thermal Relay	9-13A	MC 9-22	10A	AC 380/660V	100
TH-22-15	Thermal Relay	13-18A	MC 9-22	10A	AC 380/660V	100
TH-22-19	Thermal Relay	16-22A	MC 9-22	10A	AC 380/660V	100
TH-22-22	Thermal Relay	17-25A	MC 9-22	10A	AC 380/660V	100
TH-40-5	Thermal Relay	4-6A	MC 32-48	10A	AC 380/660V	100
TH-40-6.5	Thermal Relay	5-8A	MC 32-48	10A	AC 380/660V	100
TH-40-7.5	Thermal Relay	6-9A	MC 32-48	10A	AC 380/660V	100
TH-40-8.5	Thermal Relay	7-10A	MC 32-48	10A	AC 380/660V	100
TH-40-11	Thermal Relay	9-13A	MC 32-48	10A	AC 380/660V	100
TH-40-15	Thermal Relay	13-18A	MC 32-48	10A	AC 380/660V	100
TH-40-19	Thermal Relay	16-22A	MC 32-48	10A	AC 380/660V	100
TH-40-22	Thermal Relay	17-25A	MC 32-48	10A	AC 380/660V	100
TH-40-30	Thermal Relay	24-36A	MC 32-48	10A	AC 380/660V	100
TH-40-34	Thermal Relay	28-40A	MC 32-48	10A	AC 380/660V	100
TH-40-42	Thermal Relay	34-50A	MC 32-48	10A	AC 380/660V	100
TH-65-5	Thermal Relay	4-6A	MC 50-65	10A	AC 380/660V	100
TH-65-6.5	Thermal Relay	5-8A	MC 50-65	10A	AC 380/660V	100
TH-65-7.5	Thermal Relay	6-9A	MC 50-65	10A	AC 380/660V	100
TH-65-8.5	Thermal Relay	7-10A	MC 50-65	10A	AC 380/660V	100
TH-65-11	Thermal Relay	9-13A	MC 50-65	10A	AC 380/660V	100
TH-65-15	Thermal Relay	13-18A	MC 50-65	10A	AC 380/660V	100
TH-65-19	Thermal Relay	16-22A	MC 50-65	10A	AC 380/660V	100
TH-65-22	Thermal Relay	17-25A	MC 50-65	10A	AC 380/660V	100
TH-65-30	Thermal Relay	24-36A	MC 50-65	10A	AC 380/660V	100
TH-65-34	Thermal Relay	28-40A	MC 50-65	10A	AC 380/660V	100
TH-65-42	Thermal Relay	34-50A	MC 50-65	10A	AC 380/660V	100
TH-65-55	Thermal Relay	45-65A	MC 50-65	10A	AC 380/660V	100
TH-65-8.5	Thermal Relay	7-10A	MC 75-100	10A	AC 380/660V	100
TH-65-11	Thermal Relay	9-13A	MC 75-100	10A	AC 380/660V	100
TH-65-15	Thermal Relay	13-18A	MC 75-100	10A	AC 380/660V	100
TH-65-19	Thermal Relay	16-22A	MC 75-100	10A	AC 380/660V	100
TH-65-22	Thermal Relay	17-25A	MC 75-100	10A	AC 380/660V	100
TH-65-30	Thermal Relay	24-36A	MC 75-100	10A	AC 380/660V	100
TH-65-34	Thermal Relay	28-40A	MC 75-100	10A	AC 380/660V	100
TH-65-42	Thermal Relay	34-50A	MC 75-100	10A	AC 380/660V	100
TH-65-55	Thermal Relay	45-65A	MC 75-100	10A	AC 380/660V	100
TH-100-65	Thermal Relay	54-75A	MC 75-100	10A	AC 380/660V	100
TH-100-74	Thermal Relay	63-85A	MC 75-100	10A	AC 380/660V	100
TH-100-83	Thermal Relay	70-95A	MC 75-100	10A	AC 380/660V	100
TH-100-90	Thermal Relay	80-100A	MC 75-100	10A	AC 380/660V	100



HS-V40A-480



SL-S2P-DC



HS-V40D-1K



HS-V40A-480

SPD

Product Code	AC	DC	Ucpv	I _{max}	U _p	Pcs. / Carton
HS-V40A-480(2P)	√		480V	40kA	2kV	100
HS-V40A-480(4P)	√		480V	40kA	2kV	50
HS-V40D-1K(2P)		√	1000V	40kA	2kV	100
HS-V40D-1K(4P)		√	1000V	40kA	2kV	50



HP54



TP54

Climate Controller

Product Code	Explanation	Pcs. / Carton
HP54	Heat Temperature Setting; Ventilation Temperature setting; Alarm Parameter Setting; 4 fans Control Relays; 1 heating Control Relay; 1 alarm Control Relay	50
TP54	Temperature Control Function; Humidity Control Function (Sensors are ordered separately); 4 fans Control Relays; 1 cooling Control Relay; 1 spray (OPT) Control Relay; 1 heating Control Relay; 1 alarm Control Relay	50



HNT.A30MN



HNT.A40MN

Current transformers

Product Code	Maximum Busbar Size (mm)	Primary Current (A)	Secondary Current(A)	Nominal Power	Class 0.5	Pcs. / Carton
HNT-A30MN 30/5	30x10	30	5	1.5VA	√	100
HNT-A30MN 40/5	30x10	40	5	1.5VA	√	100
HNT-A30MN 50/5	30x10	50	5	1.5VA	√	100
HNT-A30MN 60/5	30x10	60	5	1.5VA	√	100
HNT-A30MN 75/5	30x10	75	5	1.5VA	√	100
HNT-A30MN 100/5	30x10	100	5	2.5VA	√	100
HNT-A30MN 125/5	30x10	125	5	2.5VA	√	100
HNT-A30MN 150/5	30x10	150	5	2.5VA	√	100
HNT-A30MN 200/5	30x10	200	5	2.5VA	√	100
HNT-A30MN 250/5	30x10	250	5	5VA	√	100
HNT-A30MN 300/5	30x10	300	5	5VA	√	100
HNT-A30MN 400/5	30x10	400	5	5VA	√	100
HNT-A30MN 500/5	30x10	500	5	5VA	√	100
HNT-A30MN 600/5	30x10	600	5	5VA	√	100
HNT-A40MN 30/5	40x10	30	5	1.5VA	√	60
HNT-A40MN 40/5	40x10	40	5	1.5VA	√	60
HNT-A40MN 50/5	40x10	50	5	1.5VA	√	60
HNT-A40MN 60/5	40x10	60	5	1.5VA	√	60
HNT-A40MN 75/5	40x10	75	5	1.5VA	√	60
HNT-A40MN 100/5	40x10	100	5	2.5VA	√	60
HNT-A40MN 125/5	40x10	125	5	2.5VA	√	60
HNT-A40MN 150/5	40x10	150	5	2.5VA	√	60
HNT-A40MN 200/5	40x10	200	5	2.5VA	√	60
HNT-A40MN 250/5	40x10	250	5	5VA	√	60
HNT-A40MN 300/5	40x10	300	5	5VA	√	60
HNT-A40MN 400/5	40x10	400	5	5VA	√	60
HNT-A40MN 500/5	40x10	500	5	5VA	√	60
HNT-A40MN 600/5	40x10	600	5	5VA	√	60



DT-321



DT-322



DT-322-DIN



DT-321-DIN

Temperature controller

Product Code	Explanation	Dimensions (mm)	Display	On/Off Control	Set Contact Output	Alarm Contact Output	Hysteresis setting	Upper Limit Setting for Set	Lower Limit Setting for Set	Offset Value Setting	Password Protection	Pcs. / Carton
DT-321	Temperature Controller (-30 to 150 °C) (Included NTC probe)	36x96	1x14mm	√	√	√	√	√	√	√	√	100
DT-322	Temperature Controller (-19.9 to 99.9 °C) (Included NTC probe)	36x96	1x14mm	√	√	√	√	√	√	√	√	100
DT-321-DIN	Temperature Controller (-30 to 150 °C) (Included NTC probe)	T2-Din	1x9mm	√	√	√	√	√	√	√	√	120
DT-322-DIN	Temperature Controller (-19.9 to 99.9 °C) (Included NTC probe)	T2-Din	1x9mm	√	√	√	√	√	√	√	√	120



RG-6T



RG-8T



RG-12T



PFR-6



PFR-12

Power Factor Controller

Product Code	Steps	144x144	LED Display	1 Phase 1 Current	2 Phase 1 Current	Three-Phase Capacitor	V, I, Cosφ, W, Var, VA	V, I, Cosφ, Var	Pcs. / Carton
RG-6T	6	√	√	√		√	√		20
RG-8T	8	√	√	√		√	√		20
RG-12T	12	√	√	√		√	√		20
PFR-6	6	√	√		√	√		√	12
PFR-8	8	√	√		√	√		√	12
PFR-12	12	√	√		√	√		√	12

Cam Switch

Multi-position control with precise switching for efficient operations.



On-Off Switches

NO.	Code	Description	Poles	Marking	Ampere
1 Pole 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
1	YPT101010	1-Poles On/Off Switch (0-1)	1	(0-1)	10-25A
2	YPT101016	1-Poles On/Off Switch (0-1)	1	(0-1)	16A
3	YPT101020	1-Poles On/Off Switch (0-1)	1	(0-1)	20A
4	YPT101025	1-Poles On/Off Switch (0-1)	1	(0-1)	25A
5	YPT101032	1-Poles On/Off Switch (0-1)	1	(0-1)	32A
6	YPT101040	1-Poles On/Off Switch (0-1)	1	(0-1)	40A
7	YPT101050	1-Poles On/Off Switch (0-1)	1	(0-1)	50A
8	YPT101063	1-Poles On/Off Switch (0-1)	1	(0-1)	63A
9	YPT101080	1-Poles On/Off Switch (0-1)	1	(0-1)	80A
10	YPT101100	1-Poles On/Off Switch (0-1)	1	(0-1)	100A
11	YPT101125	1-Poles On/Off Switch (0-1)	1	(0-1)	125A
12	YPT101160	1-Poles On/Off Switch (0-1)	1	(0-1)	160A
13	YPT101250	1-Poles On/Off Switch (0-1)	1	(0-1)	250A
14	YPT101315	1-Poles On/Off Switch (0-1)	1	(0-1)	315A
2 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
15	YPT201010	2-Poles On/Off Switch (0-1)	2	(0-1)	10-25A
16	YPT201016	2-Poles On/Off Switch (0-1)	2	(0-1)	16A
17	YPT201020	2-Poles On/Off Switch (0-1)	2	(0-1)	20A
18	YPT201025	2-Poles On/Off Switch (0-1)	2	(0-1)	25A
19	YPT201032	2-Poles On/Off Switch (0-1)	2	(0-1)	32A
20	YPT201040	2-Poles On/Off Switch (0-1)	2	(0-1)	40A
21	YPT201050	2-Poles On/Off Switch (0-1)	2	(0-1)	50A
22	YPT201063	2-Poles On/Off Switch (0-1)	2	(0-1)	63A
23	YPT201080	2-Poles On/Off Switch (0-1)	2	(0-1)	80A
24	YPT201100	2-Poles On/Off Switch (0-1)	2	(0-1)	100A
25	YPT201125	2-Poles On/Off Switch (0-1)	2	(0-1)	125A
26	YPT201160	2-Poles On/Off Switch (0-1)	2	(0-1)	160A
27	YPT201250	2-Poles On/Off Switch (0-1)	2	(0-1)	250A
28	YPT201315	2-Poles On/Off Switch (0-1)	2	(0-1)	315A

On-Off Switches

NO.	Code	Description	Poles	Marking	Ampere
3 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
29	YPT301010	3-Poles On/Off Switch (0-1)	3	(0-1)	10-25A
30	YPT301016	3-Poles On/Off Switch (0-1)	3	(0-1)	16A
31	YPT301020	3-Poles On/Off Switch (0-1)	3	(0-1)	20A
32	YPT301025	3-Poles On/Off Switch (0-1)	3	(0-1)	25A
33	YPT301032	3-Poles On/Off Switch (0-1)	3	(0-1)	32A
34	YPT301040	3-Poles On/Off Switch (0-1)	3	(0-1)	40A
35	YPT301050	3-Poles On/Off Switch (0-1)	3	(0-1)	50A
36	YPT301063	3-Poles On/Off Switch (0-1)	3	(0-1)	63A
37	YPT301080	3-Poles On/Off Switch (0-1)	3	(0-1)	80A
38	YPT301100	3-Poles On/Off Switch (0-1)	3	(0-1)	100A
39	YPT301125	3-Poles On/Off Switch (0-1)	3	(0-1)	125A
40	YPT301160	3-Poles On/Off Switch (0-1)	3	(0-1)	160A
41	YPT301250	3-Poles On/Off Switch (0-1)	3	(0-1)	250A
42	YPT301315	3-Poles On/Off Switch (0-1)	3	(0-1)	315A
4 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
43	YPT401010	4-Poles On/Off Switch (0-1)	4	(0-1)	10-25A
44	YPT401016	4-Poles On/Off Switch (0-1)	4	(0-1)	16A
45	YPT401020	4-Poles On/Off Switch (0-1)	4	(0-1)	20A
46	YPT401025	4-Poles On/Off Switch (0-1)	4	(0-1)	25A
47	YPT401032	4-Poles On/Off Switch (0-1)	4	(0-1)	32A
48	YPT401040	4-Poles On/Off Switch (0-1)	4	(0-1)	40A
49	YPT401050	4-Poles On/Off Switch (0-1)	4	(0-1)	50A
50	YPT401063	4-Poles On/Off Switch (0-1)	4	(0-1)	63A
51	YPT401080	4-Poles On/Off Switch (0-1)	4	(0-1)	80A
52	YPT401100	4-Poles On/Off Switch (0-1)	4	(0-1)	100A
53	YPT401125	4-Poles On/Off Switch (0-1)	4	(0-1)	125A
54	YPT401160	4-Poles On/Off Switch (0-1)	4	(0-1)	160A
55	YPT401250	4-Poles On/Off Switch (0-1)	4	(0-1)	250A
56	YPT401315	4-Poles On/Off Switch (0-1)	4	(0-1)	315A

On-Off Switches

NO.	Code	Description	Poles	Marking	Ampere
5 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
57	YPT501010	5-Poles On/Off Switch (0-1)	5	(0-1)	10-25A
58	YPT501016	5-Poles On/Off Switch (0-1)	5	(0-1)	16A
59	YPT501020	5-Poles On/Off Switch (0-1)	5	(0-1)	20A
60	YPT501025	5-Poles On/Off Switch (0-1)	5	(0-1)	25A
61	YPT501032	5-Poles On/Off Switch (0-1)	5	(0-1)	32A
62	YPT501040	5-Poles On/Off Switch (0-1)	5	(0-1)	40A
63	YPT501050	5-Poles On/Off Switch (0-1)	5	(0-1)	50A
64	YPT501063	5-Poles On/Off Switch (0-1)	5	(0-1)	63A
65	YPT501080	5-Poles On/Off Switch (0-1)	5	(0-1)	80A
66	YPT501100	5-Poles On/Off Switch (0-1)	5	(0-1)	100A
67	YPT501125	5-Poles On/Off Switch (0-1)	5	(0-1)	125A
68	YPT501160	5-Poles On/Off Switch (0-1)	5	(0-1)	160A
69	YPT501250	5-Poles On/Off Switch (0-1)	5	(0-1)	250A
70	YPT501315	5-Poles On/Off Switch (0-1)	5	(0-1)	315A
6 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
71	YPT601010	6-Poles On/Off Switch (0-1)	6	(0-1)	10-25A
72	YPT601016	6-Poles On/Off Switch (0-1)	6	(0-1)	16A
73	YPT601020	6-Poles On/Off Switch (0-1)	6	(0-1)	20A
74	YPT601025	6-Poles On/Off Switch (0-1)	6	(0-1)	25A
75	YPT601032	6-Poles On/Off Switch (0-1)	6	(0-1)	32A
76	YPT601040	6-Poles On/Off Switch (0-1)	6	(0-1)	40A
77	YPT601050	6-Poles On/Off Switch (0-1)	6	(0-1)	50A
78	YPT601063	6-Poles On/Off Switch (0-1)	6	(0-1)	63A
79	YPT601080	6-Poles On/Off Switch (0-1)	6	(0-1)	80A
80	YPT601100	6-Poles On/Off Switch (0-1)	6	(0-1)	100A
81	YPT601125	6-Poles On/Off Switch (0-1)	6	(0-1)	125A
82	YPT601160	6-Poles On/Off Switch (0-1)	6	(0-1)	160A
83	YPT601250	6-Poles On/Off Switch (0-1)	6	(0-1)	250A
84	YPT601315	6-Poles On/Off Switch (0-1)	6	(0-1)	315A



Change Over Cam Switches

NO.	Code	Description	Poles	Marking	Ampere
1 Pole 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
1	YPT105010	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	10-25A
2	YPT105016	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	16A
3	YPT105020	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	20A
4	YPT105025	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	25A
5	YPT105032	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	32A
6	YPT105040	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	40A
7	YPT105050	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	50A
8	YPT105063	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	63A
9	YPT105080	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	80A
10	YPT105100	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	100A
11	YPT105125	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	125A
12	YPT105160	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	160A
13	YPT105250	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	250A
14	YPT105315	1-Pole Changeover Switch (1-0-2)	1	(1-0-2)	315A
2 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Change Over Switches					
15	YPT205010	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	10-25A
16	YPT205016	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	16A
17	YPT205020	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	20A
18	YPT205025	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	25A
19	YPT205032	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	32A
20	YPT205040	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	40A
21	YPT205050	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	50A
22	YPT205063	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	63A
23	YPT205080	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	80A
24	YPT205100	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	100A
25	YPT205125	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	125A
26	YPT205160	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	160A
27	YPT205250	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	250A
28	YPT205315	2-Poles Changeover Switch (1-0-2)	2	(1-0-2)	315A

Change Over Cam Switches

NO.	Code	Description	Poles	Marking	Ampere
3 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere On-Off Switches					
29	YPT305010	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	10-25A
30	YPT305016	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	16A
31	YPT305020	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	20A
32	YPT305025	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	25A
33	YPT305032	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	32A
34	YPT305040	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	40A
35	YPT305050	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	50A
36	YPT305063	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	63A
37	YPT305080	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	80A
38	YPT305100	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	100A
39	YPT305125	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	125A
40	YPT305160	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	160A
41	YPT305250	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	250A
42	YPT305315	3-Poles Changeover Switch (1-0-2)	3	(1-0-2)	315A
4 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Change Over Switches					
43	YPT405010	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	10-25A
44	YPT405016	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	16A
45	YPT405020	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	20A
46	YPT405025	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	25A
47	YPT405032	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	32A
48	YPT405040	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	40A
49	YPT405050	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	50A
50	YPT405063	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	63A
51	YPT405080	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	80A
52	YPT405100	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	100A
53	YPT405125	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	125A
54	YPT405160	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	160A
55	YPT405250	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	250A
56	YPT405315	4-Poles Changeover Switch (1-0-2)	4	(1-0-2)	315A

Change Over Cam Switches

NO.	Code	Description	Poles	Marking	Ampere
5 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Change Over Switches					
57	YPT505010	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	10-25A
58	YPT505016	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	16A
59	YPT505020	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	20A
60	YPT505025	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	25A
61	YPT505032	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	32A
62	YPT505040	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	40A
63	YPT505050	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	50A
64	YPT505063	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	63A
65	YPT505080	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	80A
66	YPT505100	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	100A
67	YPT505125	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	125A
68	YPT505160	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	160A
69	YPT505250	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	250A
70	YPT505315	5-Poles Changeover Switch (1-0-2)	5	(1-0-2)	315A
6 Poles 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Change Over Switches					
71	YPT605010	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	10-25A
72	YPT605016	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	16A
73	YPT605020	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	20A
74	YPT605025	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	25A
75	YPT605032	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	32A
76	YPT605040	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	40A
77	YPT605050	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	50A
78	YPT605063	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	63A
79	YPT605080	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	80A
80	YPT605100	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	100A
81	YPT605125	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	125A
82	YPT605160	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	160A
83	YPT605250	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	250A
84	YPT605315	6-Poles Changeover Switch (1-0-2)	6	(1-0-2)	315A



YPT112080



YPT114032



YPT113080

Multi Steps Cam Switches

NO.	Code	Description	Poles	Marking	Ampere
1 Pole 2 Steps 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Multi-step Switches					
1	YPT112010	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	10-25A
2	YPT112016	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	16A
3	YPT112020	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	20A
4	YPT112025	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	25A
5	YPT112032	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	32A
6	YPT112040	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	40A
7	YPT112050	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	50A
8	YPT112063	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	63A
9	YPT112080	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	80A
10	YPT112100	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	100A
11	YPT112125	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	125A
12	YPT112160	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	160A
13	YPT112250	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	250A
14	YPT112315	1-Pole 2-Steps Multi-steps Switch	1	(0-1-2)	315A
1 Pole 3 Steps 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Multi-step Switches					
15	YPT113010	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	10-25A
16	YPT113016	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	16A
17	YPT113020	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	20A
18	YPT113025	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	25A
19	YPT113032	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	32A
20	YPT113040	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	40A
21	YPT113050	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	50A
22	YPT113063	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	63A
23	YPT113080	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	80A
24	YPT113100	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	100A
25	YPT113125	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	125A
26	YPT113160	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	160A
27	YPT113250	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	250A
28	YPT113315	1-Pole 3-Steps Multi-steps Switch	1	(0-1-2-3)	315A

Multi Steps Cam Switches

NO.	Code	Description	Poles	Marking	Ampere
1 Pole 4 Steps 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Multi-step Switches					
29	YPT114010	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	10-25A
30	YPT114016	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	16A
31	YPT114020	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	20A
32	YPT114025	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	25A
33	YPT114032	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	32A
34	YPT114040	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	40A
35	YPT114050	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	50A
36	YPT114063	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	63A
37	YPT114080	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	80A
38	YPT114100	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	100A
39	YPT114125	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	125A
40	YPT114160	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	160A
41	YPT114250	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	250A
42	YPT114315	1-Pole 4-Steps Multi-steps Switch	1	(0-1-2-3-4)	315A
1 Pole 5 Steps 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Multi-step Switches					
43	YPT115010	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	10-25A
44	YPT115016	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	16A
45	YPT115020	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	20A
46	YPT115025	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	25A
47	YPT115032	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	32A
48	YPT115040	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	40A
49	YPT115050	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	50A
50	YPT115063	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	63A
51	YPT115080	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	80A
52	YPT115100	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	100A
53	YPT115125	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	125A
54	YPT115160	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	160A
55	YPT115250	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	250A
56	YPT115315	1-Pole 5-Steps Multi-steps Switch	1	(0-1-2-3-4-5)	315A
1 Pole 7 Steps 16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere Multi-step Switches					
57	YPT117010	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	10-25A
58	YPT117016	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	16A
59	YPT117020	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	20A
60	YPT117025	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	25A
61	YPT117032	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	32A
62	YPT117040	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	40A
63	YPT117050	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	50A
64	YPT117063	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	63A
65	YPT117080	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	80A
66	YPT117100	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	100A
67	YPT117125	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	125A
68	YPT117160	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	160A
69	YPT117250	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	250A
70	YPT117315	1-Pole 7-Steps Multi-steps Switch	1	(0-1-2-3-4-5-6-7)	315A



Reversing Switch

NO.	Code	Description	Poles	Steps	Ampere
16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere, 1 Pole Reversing Switch					
1	YPT104010	1-Pole Reversing Switch	1	(1-0-1)	10-25A
2	YPT104016	1-Pole Reversing Switch	1	(1-0-1)	16A
3	YPT104020	1-Pole Reversing Switch	1	(1-0-1)	20A
4	YPT104025	1-Pole Reversing Switch	1	(1-0-1)	25A
5	YPT104032	1-Pole Reversing Switch	1	(1-0-1)	32A
6	YPT104040	1-Pole Reversing Switch	1	(1-0-1)	40A
7	YPT104050	1-Pole Reversing Switch	1	(1-0-1)	50A
8	YPT104063	1-Pole Reversing Switch	1	(1-0-1)	63A
9	YPT104080	1-Pole Reversing Switch	1	(1-0-1)	80A
10	YPT104100	1-Pole Reversing Switch	1	(1-0-1)	100A
11	YPT104125	1-Pole Reversing Switch	1	(1-0-1)	125A
12	YPT104160	1-Pole Reversing Switch	1	(1-0-1)	160A
13	YPT104250	1-Pole Reversing Switch	1	(1-0-1)	250A
14	YPT104315	1-Pole Reversing Switch	1	(1-0-1)	315A
16-20-25-32-40-50-63-80-100-125-160-250-315 Ampere, 3 Phase Reversing Switch					
15	YPT304010	3-Pole Reversing Switch	3	(1-0-1)	10-25A
16	YPT304016	3-Pole Reversing Switch	3	(1-0-1)	16A
17	YPT304020	3-Pole Reversing Switch	3	(1-0-1)	20A
18	YPT304025	3-Pole Reversing Switch	3	(1-0-1)	25A
19	YPT304032	3-Pole Reversing Switch	3	(1-0-1)	32A
20	YPT304040	3-Pole Reversing Switch	3	(1-0-1)	40A
21	YPT304050	3-Pole Reversing Switch	3	(1-0-1)	50A
22	YPT304063	3-Pole Reversing Switch	3	(1-0-1)	63A
23	YPT304080	3-Pole Reversing Switch	3	(1-0-1)	80A
24	YPT304100	3-Pole Reversing Switch	3	(1-0-1)	100A
25	YPT304125	3-Pole Reversing Switch	3	(1-0-1)	125A
26	YPT304160	3-Pole Reversing Switch	3	(1-0-1)	160A
27	YPT304250	3-Pole Reversing Switch	3	(1-0-1)	250A
28	YPT304315	3-Pole Reversing Switch	3	(1-0-1)	315A



Control Cam Switches

NO.	Code	Description	Poles	Steps	Ampere
10-16 Ampere, 3 Phase 7 Position (LL-0-LN) Voltmeter Selector					
1	YPT3V6010	3 Phase, 7 Position (LL-0-LN) Voltmeter Selector	/	(LL-0-LN)	10-25A
2	YPT3V6016	3 Phase, 7 Position (LL-0-LN) Voltmeter Selector	/	(LL-0-LN)	16A
10-16 Ampere, Ammeter Selector On Current Transformer					
3	YPT3A2010	Ammeter Selector On Current Transformer	/	(0-L1-L2-L3)	10-25A
4	YPT3A2016	Ammeter Selector On Current Transformer	/	(0-L1-L2-L3)	16A