COIL VOLTAGE

Standard coils

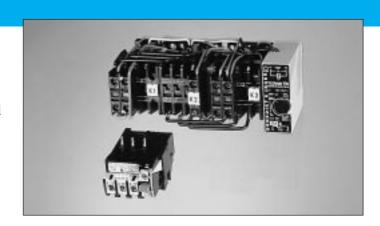
24V AC 110V AC

230V AC 400V AC

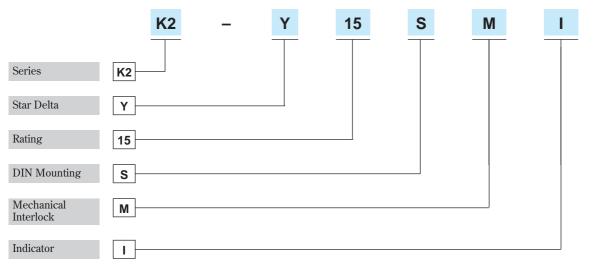


Star Delta Starters

- Open type assembled and pre-wired to accept separate overload
- LED indication in Delta position (up to 55kW)
- Variable electronic timer with inherent dwell period
- DIN rail mounting up to 30kW
- Mechanical and electrical interlock between Star and Delta contactors
- Designed to EN60947-4-1



Options and ordering codes



For overloads refer to page 36

Selection

Rating @ 400V AC		Contactors			Mechanical	Associated	Product
kW	Amps	Line K1	Delta K2	Star K3	Interlock	Overload	
7.5	16	K2-09A10 +HN10+HN01	K2-09A01	K2-09A10 +HN10+HN01	K2-8851	U1216E	K2-Y15SMI
15	30	K2-16A10 +HN10+HN01	K2-16A01	+HN10+HN01 K2-12A10 +HN10+HN01	K2-8851	U1216E	K2-Y26SMI
22	45	K2-23A01 +HN10	K2-23A01	K2-16A10 +HN10+HN01	K2-8851	U1216E/U32	K2-Y40SMI
30	60	K2-30A01 +HN01	K2-30A01	K2-23A10 +HN10+HN01	K2-8851	U1216E/U32	K2-Y52SMI
45	85	K2-45A00 +HN10+HN01	K2-45A00 +HN01	K2-30A10 +HN10+HN01	LG9345	U60	K2-Y80MI
55	109	K2-60A00 +HN10+HN01	K2-60A00 +HN01	K2-45A00 +2HN10+HN01	LG9345	U60	K2-Y100MI
75	150	K85A22	K85A22	K85A22	LG8511	U85	K2-Y140M
110	205	K110A22	K110A22	K85A22	LG8511	U85	K2-Y200



Application notes

Setting of timer

It is essential to adjust the timer for the correct changeover from Star to Delta position, this will vary according to application.

Starters with long start times

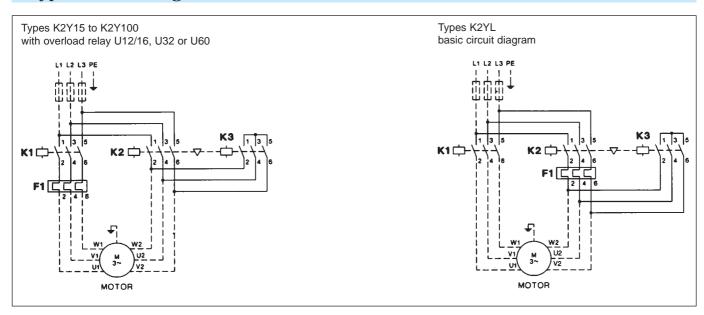
For applications when a long run-up time is required, the type Y91A timer is used with a delay of 10-60 seconds, and the overload is mounted on the Delta contactor.

Add 'L' to the ordering code eg: K2-YL52SMI.

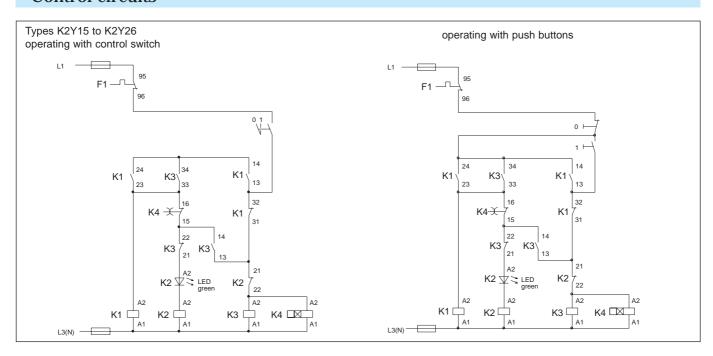
Finger touch protection

Types K2-Y15 to K2-Y52 incorporate finger touch protection as standard. For K2-Y80 to K2-Y200 it is necessary to fit an additional cover, refer to accessory section.

Typical circuit diagrams

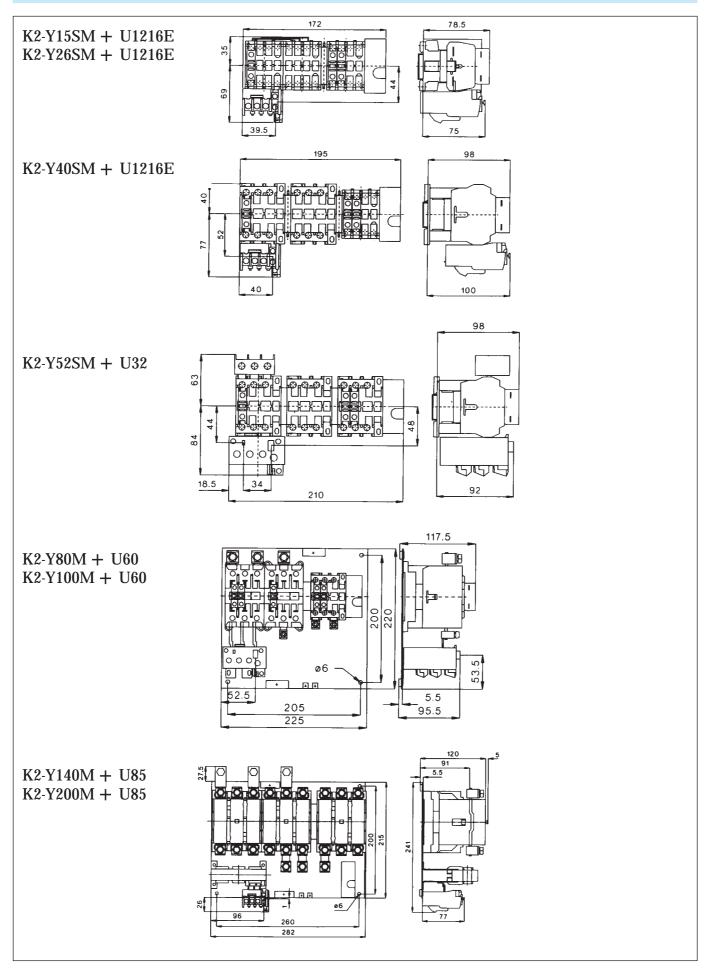


Control circuits





Dimensions (mm)





Thermal overloads

U1216E Hand Reset

Star Delta Range - Amps 3.10-4.70 4.70-7.00 7.00-10.5 10.5-15.5 14-19 18-24 23-31 30-40 38-52

U32 Hand/Auto Reset

Star Delta Range - Amps
18-24
24-35
35-48
48-73

€ Euro prices on request

€ Euro prices on request

U60 Hand/Auto Reset

	Star Delta Range - Amps
Ī	35-48
	48-73
	70-90
	90-112

U85 Hand/Auto Reset

Star Delta Range - Amps
104-156 140-207

€ Euro prices on request

€ Euro prices on request

Timer

Electronic timer specifically designed for use in Star Delta application.

Variable run-up time with an inherent dwell period of 20-30 ms during changeover from Star to Delta position. DIN rail mounting. Contacts rated 4A at 415VAC.

The timer is not continuously rated and must be wired in accordance with circuit diagram as detailed on page 34.

Time	Voltage
1-20 seconds	24-60VAC
1-20 seconds	110-415VAC
10-60 seconds	24-60VAC
10-60 seconds	110-415VAC

€ Euro prices on request

Accessories

Description	
Finger touch protection covers	
For use with	K2-Y80MI and K2-Y100MI
	K2-Y140M and K2-Y200M
Mounting bracket for Y9 timer	
Additional auxiliary contacts	
For use with	K2-Y15SMI to K2-Y100MI
	Normally open
	Normally close
Control circuit fuse - snap-on	
For use with	K2-Y15SMI to K2-Y100MI