

Technical Datasheet

This control panel is designed to switch two incoming mains supplies to one output for an electric motor driven fire pump controller. The normal mains supply is monitored on all 3 phases, and should any phase go out of tolerance the output supply is disconnected and the back-up supply is connected to the output instead.

The control panel includes various timers, which are adjustable, to ensure that a smooth transition occurs.

The incoming mains supplies are connected directly to the changeover power contactors, and suitable terminals are provided for the output supply connection.

The power switching contactors are 3 pole and AC3 rated to match the electric motor plus 5% spare capacity at 40 deg C. The neutral connection is switched through auxiliary contact blocks and are rated at 8A minimum.

The enclosure is rated to IP65 and has a cable gland plate included at the bottom.

Indicators:

Mains Supply Healthy	On Mains Supply
Back up (Alternative) Supply Healthy	On Back up (Alternative) Supply

Volt free contacts are provided, with a rating of 8A at 250v for:

Mains Supply Healthy	Back up Supply Healthy
Start Back up supply	

Note;

Compliant with the electrical requirements BS EN60947-6-1 and latest edition of TB210.8.4 for ATS's.

This change over panel is based upon contactors for switching between the two mains supplies. It does not therefore comply with BS8519 which requires switches with by-pass facilities. BS8519 is not required by the LPC rules or TB210 and if specified is above these regulations.



Technical Characteristics.

Size	MAX Amp Ie	Cabinet Size	Contactora	Making capacity <=440v	Breaking capacity	Maximum Peak Current
18.5kW	38A	400x500x200	40A AC3	400A	320A	2500A
22kW	47.5A	400x500x200	50A AC3	500A	400A	2500A
30kW	62A	400x500x200	65A AC3	650A	520A	2500A
37kW	76.2	400x500x200	80A AC3	800A	640A	2500A
45kW	90.5A	400x500x200	95A AC3	1200A	1100A	3000A
55kW	109.5A	400x600x250	115A AC3	1500A	1200A	3000A
75kW	143A	400x600x250	150A AC3	1500A	1200A	3000A
90kW	176A	600x600x250	185A AC3	N/A	N/A	2900A
110kW	214A	600x800x250	225A AC3	N/A	N/A	4000A
132kW	252A	600x800x250	265A AC3	N/A	N/A	4880A
160kW	286A	600x800x300	300A AC3	N/A	N/A	5524A
200kW	381	600x800x300	400A AC3	N/A	N/A	6600A
250kW	476A	600x800x300	500A AC3	N/A	N/A	7484A

Maximum Cable sizes;

Size	MAX Amp	Contactora Cable	Motor Terminal	Neutral Terminal	Earth Terminal
18.5kW	38A	1.5-50mm	1.5-16mm	1.5-16mm	16mm
22kW	47.5A	1.5-50mm	2.5-35mm	2.5-35mm	16mm
30kW	62A	1.5-50mm	2.5-35mm	2.5-35mm	16mm
37kW	76.2	1.5-50mm	2.5-35mm	2.5-35mm	16mm
45kW	90.5A	1.5-95mm	2.5-35mm	2.5-35mm	16mm
55kW	109.5A	1.5-95mm	35-95mm	2.5-35mm	16mm
75kW	143A	1.5-95mm	35-95mm	2.5-35mm	16mm
90kW	176A	17mm sq. copper, M8	35-95mm	16-50mm	35mm
110kW	214A	24mm sq. copper, M10	35-95mm	35-95mm	50mm
132kW	252A	24mm sq. copper, M10	35-150mm	35-95mm	50mm
160kW	286A	24mm sq. copper, M10	35-150mm	35-95mm	50mm
200kW	381	24mm sq. copper, M10	95-240mm	35-150mm	50mm
250kW	476A	24mm sq. copper, M10	300mm	95-240mm	95mm

Nomenclature;

H240-xKW-415

x=kW rating.