

Technical Datasheet

This electric motor controller, type H200s, is specifically designed to meet and exceed the requirements of standards EN12845, LPS1237 and LPC TB210. The controller will start and stop one electric motor by star-delta (H200s) starting means which is activated by a pressure switch input or by a manual start push button. Other starting methods such as direct on line (H210s), VFD (H230) & soft start (H220s) are also available. The VFD (H230) version can be used for reduced starting current and pressure limiting purposes. The controller is designed for 415v 3 phase (No neutral required) 50Hz mains supplies and can be designed for other voltages, such as 230v 3 phase.



At the heart of the control system is a purpose designed input/output board and a door mounted module with a graphic display and push buttons. This combined system provides a user-friendly interface for ease of set up, operation and installation.

The control system provides data logging of all events, each logged with time and date. A USB port is provided to enable the various log files to be downloaded.

The graphic display provides the following information:

| | | | |
|--------------------------|---------------|----------------|----------------|
| Line to line voltmeters, | Frequency, | Motor current, | Hours run |
| Power, | Power factor, | Demands, | Phase rotation |

The system can optionally show and store water pressure if a pressure transducer is fitted.

Indicators are provided for the following:

| | | | |
|------------------|----------------|-----------------|-------------|
| Pump on demand | Running output | Pump running | Not in auto |
| 3x Phase healthy | General alarm | Failed to start | |

The following timers and set points are available as a minimum:

| | | | |
|--------------------|------------------------|---------------------|--------------------|
| Delay start timer, | Failed to start timer, | Star to delta timer | High & low voltage |
|--------------------|------------------------|---------------------|--------------------|

Volt free contacts are provided, with a rating for 30v DC at 0.3A for:

| | | | |
|----------------------|-----------------|---------------|-------------|
| Mains supply status, | Pump on demand, | Pump running, | Pump Failed |
| Not in Auto | Common fault | | |

The motor protection is via fuses sized in accordance to BS-EN12845, LPS1237 and TB210. A motor ammeter is provided on screen. The enclosure is rated to IP65 as standard and is manufactured from mild steel finished in red. An electronic alarm is provided, which is mutable, to sound when an alarm is present.

Controller Fuses & Cable Details;

| | Typical | | | Incoming |
|--------------|------------------|---------------|--------------|-----------------------------|
| motor | Full load | Fuse | Fuse | Cable |
| kW | current | Rating | Type | Sizes |
| 5.5 | 12 | 16A | 10x51 16A aM | 2.5-16mm |
| 7.5 | 14 | 20A | 10x51 20A aM | 2.5-16mm |
| 11 | 20 | 32A | 10x51 32A aM | 2.5-16mm |
| 15 | 28 | 40A | 14x51 50A aM | 2.5-16mm |
| 18.5 | 34 | 50A | 14x51 50A aM | 2.5-16mm |
| 22 | 38 | 50A | 14x51 50A aM | 2.5-35mm |
| 30 | 54 | 63A | 14x51 63A aM | 2.5-35mm |
| 37 | 66 | 100A | NH00 100A aM | 95mm |
| 45 | 80 | 125A | NH00 125A aM | 95mm |
| 55 | 95 | 125A | NH00 125A aM | 95mm |
| 75 | 130 | 160A | NH00 160A aM | 120mm |
| 90 | 155 | 250A | NH-1 250A aM | 120mm |
| 110 | 188 | 250A | NH-1 250A aM | 185mm |
| 132 | 229 | 315A | NH-1 315A aM | 185mm |
| 160 | 275 | 400A | NH-1 400A aM | 185mm |
| 185 | 304 | 400A | NH-2 400A aM | 240mm |
| 200 | 336 | 400A | NH-2 400A aM | 240mm |
| 250 | 425 | 500A | NH-3 500A aM | 40x42 Cu plate, M12 bolt |

Nomenclature;

H200s-xKW-y x=kW rating, y= AC voltage