

## Motor Starters



The Gresham Range of Motor Starters are 440V I/P and O/P with under-voltage and phase rotation protection. They also incorporate trip functions derived from the motor.

Direct on line up to 30kW

Closed transition star delta up to 65kW

Each starter includes:

- Lockable isolator switch.
- Contactor for motor control.
- A suitably sized, control transformer with primary fuses and secondary fuses.
- Either two stage overload protection (alarm and trip) using two sets of thermistors (3 thermistors per set) or thermal overload relay protection.
- Under-voltage and single phasing protection.
- Reset pushbutton
- Selector switch: Off/Local/Remote.
- Start pushbutton.
- Stop pushbutton.
- Running indication LED (Green).
- Alarm indication LED (Yellow).
- Tripped indication LED (Red).
- Supply available LED (White).

Each starter has the following remote interfaces

- Three sets of terminals for remote stop signals operating in both local and remote modes.(non-momentary, normally closed, open to stop)
- Two sets of remote stop terminals only operating in remote mode (momentary, normally open, close to stop)
- Two sets of remote start contacts only operating in remote mode. (momentary, normally open, closed to stop)
- One set of terminals for three wire remote start/stop signals only operating in remote mode. (momentary, normally open, close to start/stop).
- One set of volt free contacts to indicate motor running
- One set of volt free contacts to indicate motor tripped
- One set of volt free contacts to indicate starter in remote mode
- One set of volt free contacts to indicate starter in alarm (thermistor 130deg C).

### Options

Overload relay, additional trip and alarm inputs, aspirator control, reversing, hour run meter.

### Ingress Protection

IP44

### Ambient Temperature.

0°C to + 60°C.

### Relative Humidity

10% to 95% non-condensing.

### Local controls and indications

Isolator switch	Lockable Isolator
Local/ off / remote	Rotary Mode selector switch
Start Pushbutton	I (Green)
Stop Pushbutton	0 (Red)
Reset Pushbutton	Yellow
Supply available	White LED
Running Indication	Green LED
Tripped Indication	Red LED
Alarm indication	Yellow LED

### Remote Control and indications

Stop	x3 for operation in both local and remote
Stop	x2 for operation in remote mode only (momentary)
Start	x2 for operation in remote mode only (momentary)
Start/stop	for operation in remote mode only (momentary)
Running	NC/C/NO volt free contacts
Tripped	NC/C/NO volt free contacts
Remote Mode	NC/C/NO volt free contacts
Alarm	NC/C/NO volt free contacts

Remote indications are made using volt free changeover contacts. Contacts are suitable for low-level "dry-circuit" logic switching. Maximum rating is 1A at 115V ac or 28V DC.

### Motor Thermal protection

Overload protection relay or thermistor inputs for alarm at 130°C and trip at 150°C.

### Under-voltage module

Trips the contactor in the event of any missing input voltage phase or reverse phase rotation

### Motor Trip

If the motor has tripped either due to thermal overload or the under-voltage module, the red tripped LED will be illuminated. Reset the trip by pressing the yellow reset pushbutton.

### Hours Run meter

Hour run meter to record the running time of the motor. The hour run meter is powered from the internal 24V DC and is operable in both local and remote modes. The meter is fitted on the back panel and can be viewed by opening the starter panel lid.



### Typical Applications and physical parameters

Description	Motor Power Rating	Installation Drawing No	Dimensions O/A w x h x d (mm)	Fixings (mm)	Weight kg
Emergency fresh water supply pump starter	0.33kW	183-11486/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Grey Water pump starter	0.44kW	183-11555/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
AFFF transfer pump starter	0.7kW	183-11452/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Fuel oil stripping pump starter	0.7kW	183-11454/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Gear box oil transfer pump starter	0.7kW	183-11456/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Lub oil transfer pump starter	0.7kW	183-11457/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Waste Oil transfer pump starter	0.7kW	183-11458/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Oily water starter	0.9kW	183-11450/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
AVTUR Oily water pump starter	0.75kW	183-11485/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Slow speed drive cooling pump starter	0.9kW	183-11459/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Fuel oil transfer pump starter	4.6kW	183-11455/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Gearbox SW standby pump	8.6kW	183-11461/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Raw Sewage Discharge pump starter	9.0kW	183-11484/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Bilge pump starter	13kW	183-11449/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
HPSW pump type 2 starter	14.5kW	183-11462/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	11
Fire monitor boost pump starter	26.5kW	183-11451/1	330 x 420 x 210	4 holes 9mm dia centres (wxh) 260 x 400	15
Gearbox lub oil standby pump starter	17kW	183-11460/1	330 x 420 x 210	4 holes 9mm dia centres (wxh) 260 x 400	15
HPSW pump type 1 starter	65kW	183-11434/1	636 x 902 x 265	4 holes 9mm dia centres (wxh) 560 x 860	65
Turning gear starter	1.5kW	183-11532/1	281 x 400 x 166	4 holes 9mm dia centres (wxh) 200 x 380	10