

Display & Programming.

Mode	LED	Function	Parameter	▼	▲	Display	Default
%	Red	Measurement in %		Min. Peak	Max. Peak	% kW, HP**	
kW/HP	Red	Measurement in kW		P2	P1Max	kW	
kW/HP	Green	Measurement in HP		P2	P1Max	HP	
Ts	Red	Start timer	0.0 - 999 sec.	Decrease	Increase	Ts[Sec]	2.0
Tr	Red	Response timer	0.0 - 999 sec.	Decrease	Increase	Tr[Sec]	0.1
Parameter	Red	Parameter access	P00 - P15	Decrease	Increase	Parameter no.	
Limit 1	Red/Green	Setpoint limit 1	6 - 99 %**	Decrease	Increase	Setpoint [%]	80**
Limit 2	Red/Green	Setpoint limit 2	6 - 99 %**	Decrease	Increase	Setpoint [%]	20**
Range I/U	Red	Current range	0.5 - 600/5A	Decrease	Increase	Current [A]	10
Range I/U	Green	Voltage range	100 - 575 Vac	Decrease	Increase	Voltage [V]	460*
Relay 1	Red	Relay polarity 1	n.inv / inv	Decrease	Increase	n.in / in	n.in
Relay 2	Red	Relay polarity 2	n.inv / inv	Decrease	Increase	n.in / in	n.in

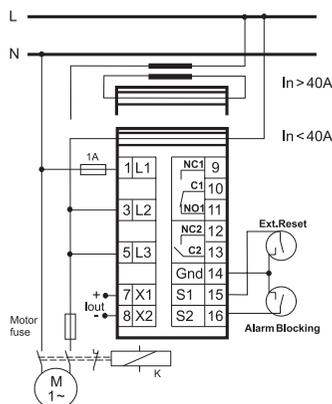
* Depends on order specifications
 ** Value depends on display mode (P02)

The HPL580 is programmed by the use of only three keys located on the front panel. The "MODE" key is used to select one of the programmable parameters. All directly accessible parameters as well as their adjustable range are listed in the table above. Parameters are stored in EEPROM. If no key is activated for approx. 30 seconds, the display defaults to showing the measurement. The function of the keys is repeated if held down continuously. **Note:** If P15 is enabled P01 must be unlocked before changing parameters.

Access to the parameter list is found under the field „Parameter“. The display shows P00, which using the arrow-up key must be changed to the desired number (see table to the right). Upon pressing the „Mode“ key the value of the selected parameter is shown. It may now be changed using the arrow keys. To store the new value press the „Mode“ key and the unit returns to the parameter list. Pressing the „Reset“ key instead of the „Mode“ key discards the new value and keeps the old value and the unit returns to showing the measured value.

Note: When displaying setpoints a max-limit is displayed with a red LED and a min-limit with a green LED. This only applies to setpoints and not alarms, which are always displayed with a flashing red LED.

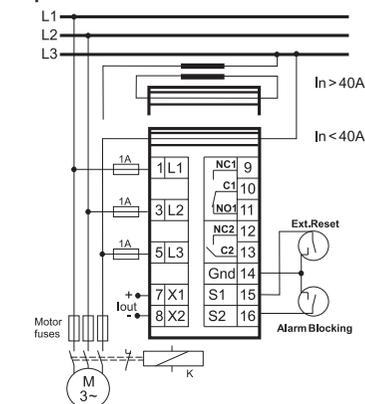
**Note: Current must be measured in the L3 phase (Terminal 5).
 Direction is not important**



Single phase - connect phase to both L2 & L3
 Connection to a single phased load

Nr.	Parameter	Range
P01	Keylock	Off, On*
P02	Display mode	% kW, HP
P03	Type limit 1	Off, Lo, Hi
P04	Type limit 2	Off, Lo, Hi
P05	Auto Shut Down	Off, On
P06	Hysteresis limit 1	Off, 1 - 50%**
P07	Hysteresis limit 2	Off, 1 - 50%
P08	Maximum shaft power	40 - 100% of P***
P09	Motorefficiency	50 - 100%
P10	Iout = P1 or P2	P1, P2
P11	Pmin (Iout = 0(4)mA)	0 - 50%
P12	Pmax (Iout = 20mA)	50 - 100%
P13	Type of Iout	0-20mA, 4-20mA
P14	Iout mode	n.inv, inv.
P15	Auto lock	Off, On
P16	Damping filter	Off, On
P17	S2 Select	nor, SPC
P18	Factory settings	Par, rSt-dEF

Underlined values are factory settings
 * If P15 is enabled default is On
 ** Value is set in %, kW or HP (depending on display mode) in the range equivalent to 1-50% of the Maximum Shaft power (P08)
 *** Value is set in kW or HP (depending on display mode) in the range equivalent to 40 - 100% of the measuring range (P)



Connection to a three phased load

Unipower

HPL580
 Version 1.0

Technical information

English edition

Technical Specifications

Mechanical spec.

Housing

Makrolon 8020 (30% GV), UL94V-1 (house).
 Makrolon 2800, UL94V-2 (connector + front).

Mounting

Snap-on construction for 35mm DIN-rail or wall mounting.

Protection class

IP40 (house).
 IP20 (connector).

Operating Temperature range:

-15 - +50 °C surrounding air.

Weight: Approx. 250g.

Dimensions: D 110 x W 56 x H 75 mm.

Terminal tight. torque: 7lbs/in, 0.79Nm

Use 60/75 copper (CU) wire only

Electrical spec.

Supply / measuring voltage

1x100 - 1x400Vac, 10 ranges.

3x100 - 3x575Vac, 17 ranges

Ranges selectable via face plate

Current range

Internal: 0.5, 1, 2.5, 5, 10, 20, 30 & 40A

External: With N/5A converter (50-600A)

Ranges selectable via face plate

Accuracy: Class 2.

Consumption: 2 VA

Frequency range: 45 - 65 Hz

Relay spec.: 250 VAC/5 Amp.

Analogue output

0(4)-20mA, max load 400Ω

galvanically isolated from the measuring system.

CE-mark to:

EN61326-1, EN61010-1

UL certified:

UL508, File E194022



Generally

Unipower HPL580 is equipped with a specially developed power supply for use from 100V - 575V - both single phased and three phased. Mains voltages in the whole world is hereby covered with one unit. HPL580 also measures currents up to 40A without the use of an external current converter.

As all Unipower HPL-modules the HPL580 naturally integrates the functions necessary to establish an efficient and compact supervision or control; Start timer, reaction timer, setpoints etc.

For setup simplicity the HPL580 includes peak detectors on the power measurement.

In addition to % all setpoints may be entered in kW or HP.

