Unipower HPL426

Load monitor with 2 Max. limits

Generally

kW-monitor with embedded functions for the control and supervision of AC-motor driven equipment. Besides kW the HPL426 is able to perform phase order supervision. The unit contains 2 independant Max. limits. The current range can be selected for each of the limits. The input S2 determines which limit should be active. The unit contains an analogue output 4-20mA proportional to the kW-measurement. During an alarm condition the analogue output is set to 0mA.

Features

* kW[%] measurement
* Digital programming
* Start timer 0,1-25 sec.
* Reaction timer 10ms-25 sec.
* Max. limit 1 5-100%
* Max. limit 2 5-100%
* 8 A directly or external C/T
* Phase order supervision
* Peak detector

Applications

* Supervision of 2-speed motor driven equipment, e.g. cranes
* Control of material flow
* Control of mixers
* Control of mixers
* 2-point regulation via hysteresis
* Machinery where an alarm is required at a given motor torque

Technical data

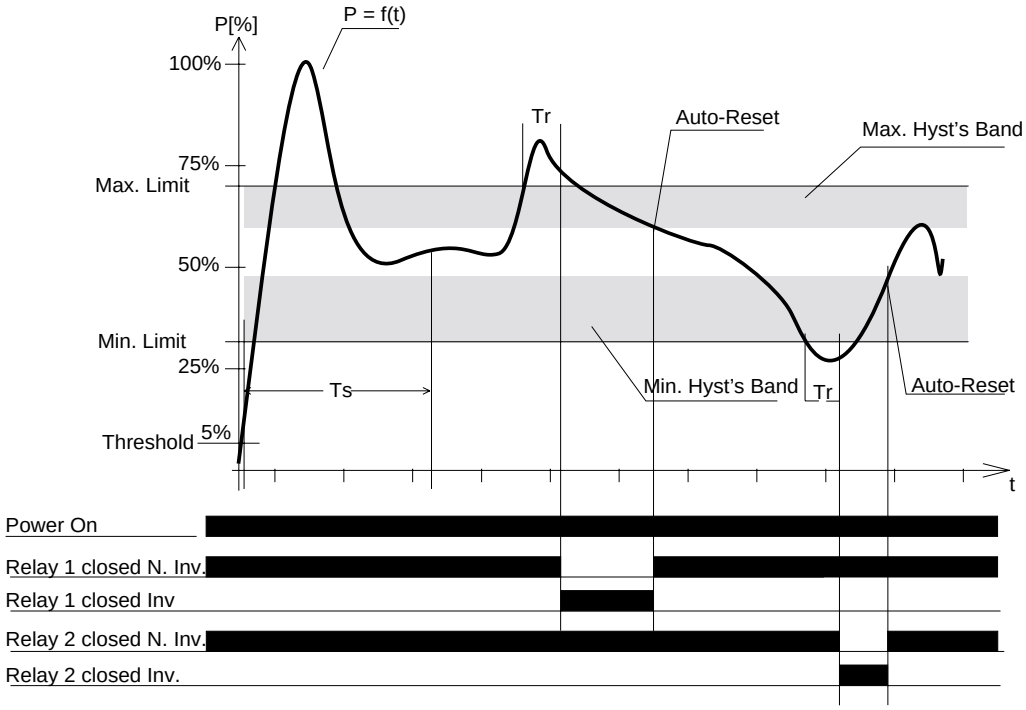
Mechanical

Housing:	Makrolon UL94V-1 (housing) Makrolon UL94V-2 (connector)
Mounting:	35 mm DIN rail- or wall mounting
IP class:	Housing IP40 Connector IP20
Temp range:	-15 to +50 °C
Weight:	500 g
Dimensions:	D 75 x B 56 x H 110 mm
UL certif.:	UL508. File E190959

Electrical

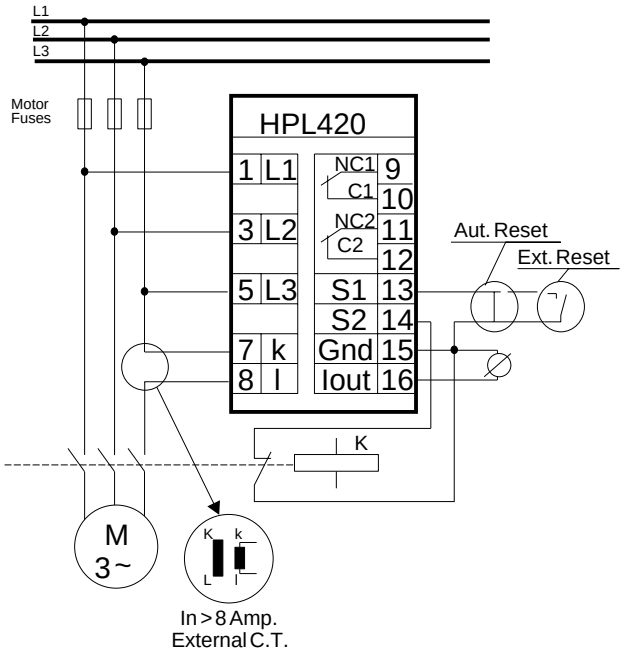
Supply/measurement:	See technical info on the unit
Available:	3x120 to 3x575V~
Current range:	Internal max 8 A~ External N/1 or N/5 A~
Frequency range:	50/60 Hz
Consumption:	3 VA
Relay ratings:	250V~/5A~
Analogue output:	4-20 mA max 400 ohm
CE mark to:	EN50081-1, EN50082-2, EN61010-1

Unipower leading in digital and analogue load monitors and measurement transducers.



The Figure above shows a typical AC-motor power consumption curve immediately after power has been applied to the motor. The bars at the bottom of the figure indicate power applied to the unit and the position/state of the relay (On/Off). The figure shows the function of Ts, Tr and Hysteresis on the Max. 1 limit. The hysteresis function is enabled by connecting the S1 input to Gnd (Autoreset). If S2 is open limit 2 will be active. If S2 is connected to GND limit 1 will be active. Phase order error results in relay 1 (not relay 2) opening and Iout equals 0mA.

Typical wiring



Unipower product program

Units for DIN-rail mounting (35mm) or panel mounting (72 x 72).

Measurement transducers: 1- and 3-phase symmetric and asymmetric kW-measurement, before and after frequency inverters. Analogue output (4-20mA) and pulse output (kWh).

Load monitors: 3-phased symmetric and asymmetric kW-measurement. Programmable kW-limits: Max., Min and dP/dt. Support functions: Start timer, reaction timer, hysteresis, auto reset, manual reset, alarm blocking etc. Analogue output (4-20mA).

Tool supervision: Compact units for supervision of up to 16 cuts. Measurement of power and work for break, wear and missing tool. Monitoring program for installation and statistics, for DOS or Windows.