MOTOR MANAGEMENT SYSTEM

INTEGRAL SOLUTION FOR MCCs ADAPTABLE TO EVERY CUSTOMER NEEDS

MULTIFUNCTION

FAULT REPORTS

4 fault reports with the following information: dates, measurements, status bits, inputs ans outputs.

SELF-DIAGNOSIS, INSTALLATION MONITORING AND STATISTICS

- Earth toroidal disconnection monitoring.
- PTC sensor open circuit and short circuit detection.
- Magnetic module hardware monitoring.
- Non-volatile memory stored information coherence.
- Number of motor start ups.
- Medium and maximum current of last start up.
- Number of faults for the following functions: Overload, PTC, JAM, locked rotor and neutral faults.
- Operating hours counter.

TEST MENU

Operation check on LEDs and outputs.

DESIGNED FOR SCADA APPLICATIONS

RTU Modbus protocol and RS485 communication

MODULAR AND SCALABLE

The basic functions of the system can be extended with different modules (PBM H, PBM D...)

COMMUNICATION SOFTWARE PBCom

PBM B

PBM H

PROTEC TION FUNCTIONS

- $\theta>$ Overload with thermal image
- Overheating protection (PTC sensor)
- Phase imbalance or phase failure
- Phase sequence
- JAM JAM detection
- Locked rotor detection
- $I_g>>$ Instantaneous earth leakage overcurrent
- $I_g>$ Earth leakage inverse time overcurrent
- $I_0>>$ Instantaneous neutral overcurrent
- $I_0>$ Neutral inverse time overcurrent
- $I<$ Undercurrent

CE c UL us LISTED

CH ARACTER ISTICS PBM B	
Auxiliary supply	110/230 Vac/dc 24/48 Vcc
Frequency	50/60/Variable (45-65) Hz
Range	Adjustable 0,8 - 6 A PBM-B 1 4 - 25 A PBM-B 5 > 25 A PBM-B 1 + 3xTI.../1 > 25 A PBM-B 5 + 3xTI.../5
Optional	PBM-H display module HMI
Inputs	1 x PTC temperature sensor 1 x Toroidal transformer (external earth fault) 1 x Digital input 24 Vdc
Outputs	2 x NO-NC contact
Communication	RS485 ModBus RTU
Signalling	5 signalling LEDs
Reset model	Manual, automatic and automatic time delayed
Test	Specific test menu

CH ARACTER ISTICS PBM H	
LCD Display	20 x 2 alphanumeric characters
Keyboard	9 keys
Communication	RJ45 connector to relay
Signalling	6 configurable signalling LEDs
Reset model	Manual, automatic and automatic time delayed
Test	Specific test menu

CONNECTION CABLES PBM B / PBM H		
Model	CDCNB	CDCN1
Code	**17008**	**17009**
Length*	0,5 m	1 m

* For other cable lenghts please consult.

PBM B

BASE MODULE

Current measurement is obtained from the motor line through the magnetic module without need of external current transformers.

From 0,8 up to 25 A with internal current transformers.

Over 25 A with external current transformers.

MODEL LIST

MODULE	B				
PHASE MEASUREMENT		1 5			IB=0,8 - 6 A IB=4 - 25 A
POWER SUPPLY			1 2		110/230 Vac/Vdc 24/48 Vdc
REVISION				0	

PBM H

HMI MODULE

This is an optional display module with an LCD screen for signalling, control and setting.

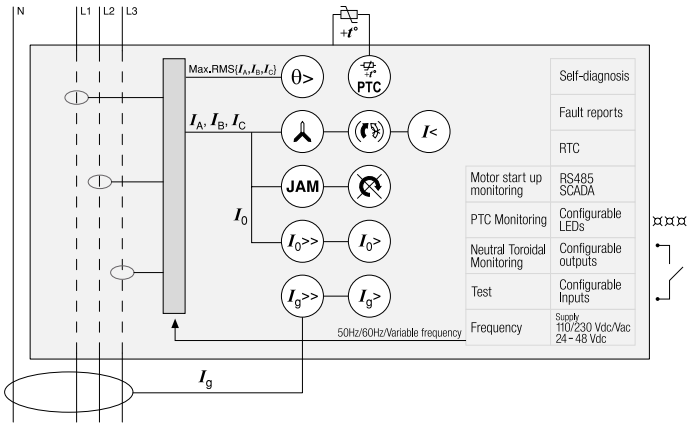
The LEDs can be configured and are identified by labels.

Access to menus is intuitive and direct, making protection system commissioning easier.

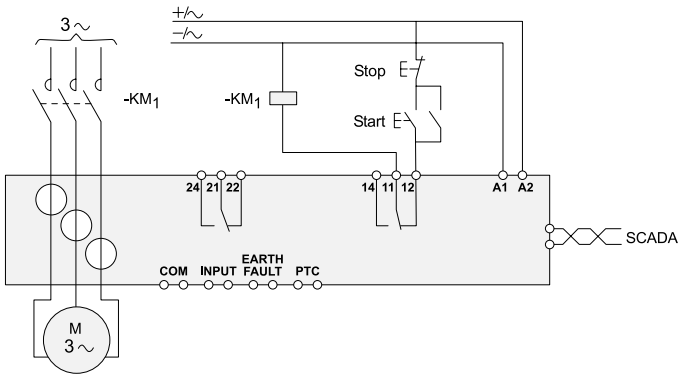
MODEL LIST

MODULE	H				
HMI		1			HMI with 6 leds
LANGUAGE			E S F P		English Spanish French Polish
REVISION				0	

FUNCTION DIAGRAM PBM B

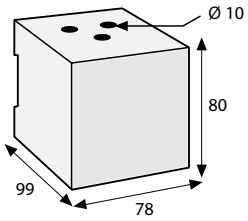


CONNECTION DIAGRAM PBM B



DIMENSIONS (mm)

PBM B



PBM H