POWER ELECTRONICS

V5 SERIES

1. TECHNICAL CHARACTERISTICS

INPUT	Input voltage Input frequency Control voltage	230 to 690Vac (-20% A +10%) 3-phases 47 to 62 Hz 230Vac ±10%, others under demand
OUTPUT	Motor output voltage Output frequency Efficiency (at full load)	0Vac to V. Input 47 to 62 Hz >99%
ENVIRONMENTAL CONDITIONS	Protection degree Operation temperature Storage temperature Humidity Altitude Altitude losses (> 1000)	IP20 0ºC to 50ºC 0ºC to +70ºC 95% at 40ºC, non condensing 1000m -1% per each 100m; maximum 3000m
LEDS INDICATION	LED 1 LED 2 LED 3	Orange: On, control board is powered Green: Flashing, motor accelerating or decelerating Red: On, fault present
INPUTS	5 Programmable digital inputs 1 PTC input 2 Analogue inputs programmable 0 – 10Vdc, 4 – 20mA	
OUTPUTS	3 Programmable change over relays (230Vac, 10A, non inductive) 1 Analogue output 4 – 20mA	
SERIES COMMUNICATION	RS232 / RS485 port Standard Modbus protocol Profibus and DeviceNet (optional)	
CONTROL MODES	Local, from keypad Remote, via digital inputs Via communication network	
MOTOR PROTECTIONS	Input phase loss Input phase sequence High input voltage Low input voltage Starting current limit Locked rotor Motor overloaded (thermal model) Under-load Phases imbalance Motor over-temperature (PTC, normal status 150Ω - 2k7) Shearpin current	
SOFTSTARTER PROTECTIONS	Thyristor fault Softstarter over-temperature	

SOFTSTARTER SETTINGS	Torque surge (Power Electronics exclusive) Initial torque Initial torque time Acceleration time Current limit: 1 to 5In Overload: 0.8 to 1.2In Overload slope: 0 to 10 Deceleration time / Freewheel stop DC Braking (DCB) Slow speed (1/7 of fundamental frequency) Dual setting Number of startings allowed Torque control Water hammer surge control stop
DISPLAYED INFORMATION	Phase current Input voltage supply Relays status Digital inputs status / PTC status Analogue inputs value Analogue output value Overload status Motor supply frequency Motor power factor Motor shaft torque / developed power Fault history (5 latest faults)
CERTIFIED	CE, UL, cUL, cTick