

V2

ELECTRONIC SOFT STARTER



V2 SERIES

For over two decades, the V2 series is part of the family of Power Electronics' soft starters. It is a compact and efficient solution. It is equipped with an advanced control technology and motor protection. With coated electronics, the V2 is resistant in harsh environments. It has also been designed in two versions, IP00 and IP54 incorporating an integrated bypass that reduces wiring installation.

Features as underload and overload, two stopping options, by inertia or deceleration ramp and its compact size and multiple protections make this soft starter the optimum solution for many applications.

ROBUST, EASY AND
COMPATIBLE WITH
MULTIPLE APPLICATIONS

- VOLTAGE RANGE FROM 230V - 400V AND POWER FROM 2.2KW - 37KW
- MULTIPLE BUILT-IN MOTOR PROTECTIONS
- WIDE TEMPERATURE RANGE FROM 0° TO +50°C (IP54)/40°C (IP00)
- AVAILABLE WITH INTERNAL BYPASS
- MAXIMUM STARTING TORQUE IN MOTOR
- EASY ADJUSTMENT OF PARAMETERS USING POTENTIOMETERS
- 3 YEAR WARRANTY AND 24H SERVICE AND REPLACEMENT COMMITMENT

V2 SERIES - TOPOLOGY

WIDE POWER RANGE

Power from 2.2kW to 37kW, 220-400V. Giving your installation features that guarantee a safe operation.

EASY INSTALLATION

Its compact size makes possible the installation of multiple softstarters in the same cabinet.



COATED BOARDS

V2 boards are coated to withstand the harshest environments.

AVAILABLE WITH
INTEGRATED BYPASS.
MOTOR PROTECTIONS
STILL ACTIVE

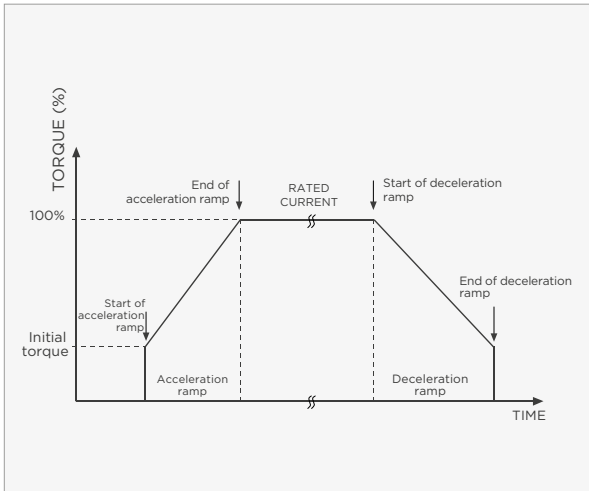
DEGREE OF PROTECTION IP54 AND IP00

The V2 soft starters are available with IP00 protection for temperatures of 40°C (with external bypass) and IP54 for temperatures of 50°C (with built-in bypass).

EASY SET UP OF PARAMETERS







A series of potentiometers allow a precise adjustment of parameters and protections.

LED status indicators allow an easy configuration and monitoring.

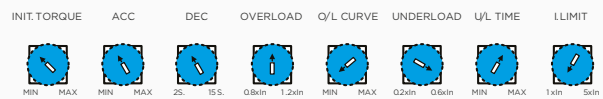


EASY PROGRAMMING

The potentiometers adjust parameters such as current limit, overload, underload, initial torque, acceleration and deceleration ramps and overload curve .

- LED1  READY
- LED2  RUN
- LED3  OL WARNING/ UL FAULT
- LED4  OVERLOAD
- LED5  OVERTEMPERATURE
- LED6  GENERAL FAULT

NORMAL START POTENTIOMETERS CONFIGURATION



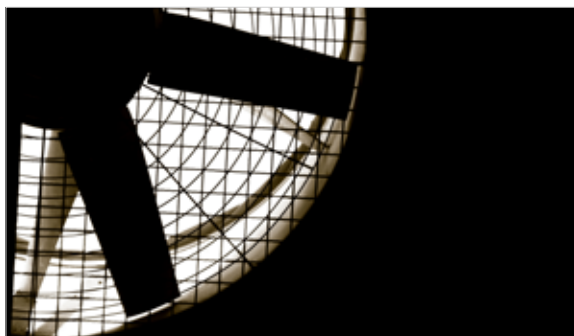
APPLICATIONS

Use the V2 soft starter with protections for overload, underload and for locked rotor, protecting your pumping equipment the best way possible. Furthermore, this soft starter has torque control or deceleration ramp features that will prevent water hammer.

Overall, the V2 with its soft start reduces mechanical stress to a minimum and extends the life of your facility.

The IP54 protection and coated boards is suitable for more aggressive environments.

Finally, pumps, fans, conveyors, compressors, agitators, mixers, elevators, cranes, forklifts ... are some examples of applications that can benefit from the use of this equipment.



V2

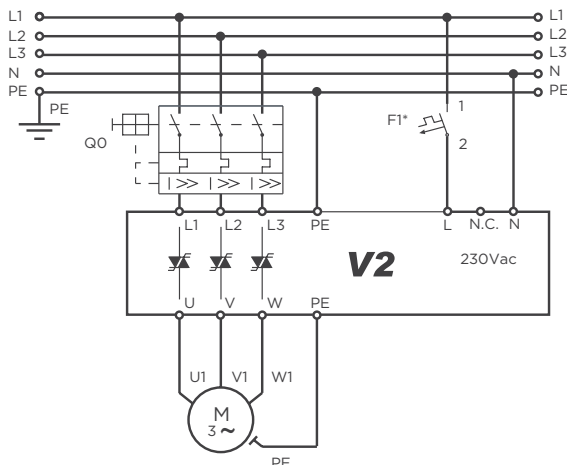
TECHNICAL CHARACTERISTICS

INPUT	Input voltage	(3 phase) 230-400V ($\pm 10\%$)	
	Current range	9A to 75A	
	Frequency	47 to 62 Hz	
	Control voltage	230V $\pm 10\%$, others under demand	
OUTPUT	Output voltage	0 to 100% of input voltage	
	Output frequency	47 - 62 Hz	
	Efficiency (at full load)	>99%	
ENVIRONMENTAL CONDITIONS	Ambient temperature	Operation: 0°C to +40°C. for IP00 Operation: 0°C to +50°C. for IP54	
	Storage temperature	0°C to +70°C	
	Humidity	95% at 40°C non condensing	
	Altitude de-rating	>1000m, 1% each 100m; maximum 3000m	
	Protection degree	IP00; IP54	
	Cooling	Natural	
MOTOR PROTECTIONS	Input phase loss	Starting current limit	
	Rotor locked	Motor overload (thermal model)	
	Underload	Phases imbalance	
SOFT STARTER PROTECTIONS	General fault	V2 over temperature	
ADJUSTMENTS	Initial torque 30 to 99%	Acceleration ramp 0 to 15 sec.	
	Deceleration ramp 0 to 45 sec.	Overload 0.8 to 1.2 In	
	Overload curve 1 to 10	Underload 0.2 to 0.6 In	
	Underload curve 1 to 10	Current limit 1 to 5 In	
AUXILIARY CONTACTS	2 change over relays 5A, 230Vac	Fault relay	
	Instantaneous relay		
LED'S INDICATIONS	LED 1 Ready		
	LED 2 Start		
	LED 3 Overload warning / Underload fault		
	LED 4 Overload		
	LED 5 Overtemperature		
	LED 6 General fault		
REGULATIONS	CE, UL ^[1] , cUL ^[1] , cTick		

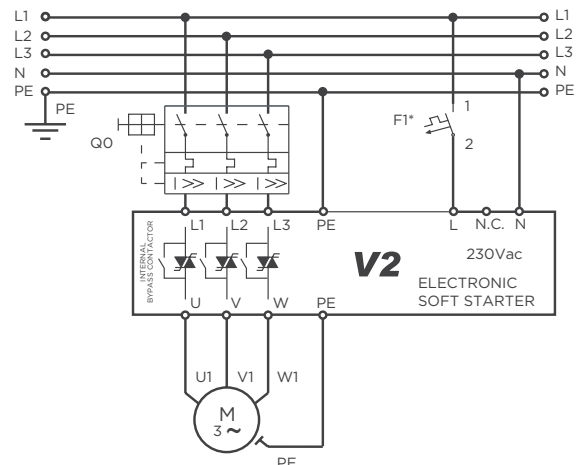
NOTE [1] On process.

POWER WIRING CONFIGURATION

STANDARD CONNECTION



INTERNAL BYPASS CONNECTION

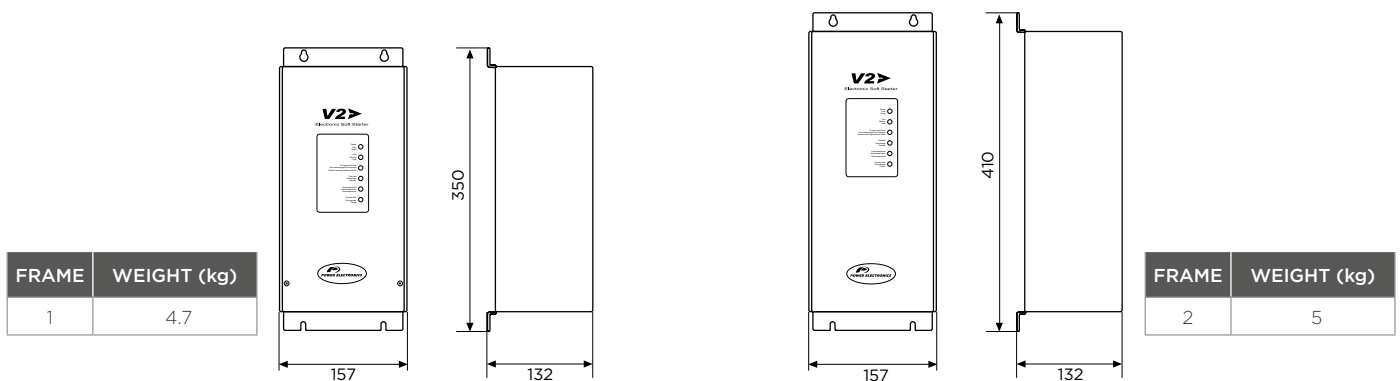


V2 - STANDARD RATINGS

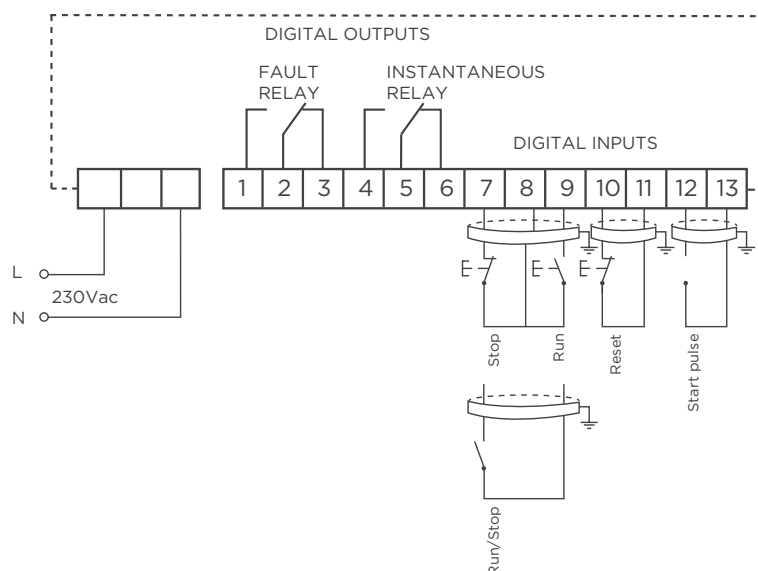
FRAME	CODE	Rated I(A)	POWER MOTOR (kW) at 230V	POWER MOTOR (kW) at 400V	PROTECTION DEGREE
1	V2009	9	2.2	4	IP00
	V2017	17	4	7.5	IP00
	V2030	30	9	15	IP00
	V2045	45	15	22	IP00
	V2060 ^[1]	60	18.5	30	IP00
	V2075 ^[1]	75	22	37	IP00
	V2009B	9	2.2	4	IP54
	V2017B	17	4	7.5	IP54
	V2030B	30	9	15	IP54
2	V2045B	45	15	22	IP54
	V2060B	60	18.5	30	IP54
	V2075B	75	22	37	IP54

NOTE [1] Includes an integrated Bypass function. The motor protection is operating all the time.

V2 - DIMENSIONS AND WEIGHTS



V2 - CONTROL WIRING CONFIGURATION



Warranty

Power Electronics (the Seller) warrants that their INDUSTRIAL Products are free of faults and defects for a period of 3 years, valid from the date of delivery to the Buyer. It shall be understood that a product is free of faults and defects when its condition and performance is in compliance with its specification.



The warranty shall not extend to any Products whose defects are due to (i) careless or improper use, (ii) failure to observe the Seller's instructions regarding the transport, installation, functioning, maintenance and the storage of the Products, (iii) repairs or modifications made by the Buyer or third party without prior written authorization of the Seller, (iv) negligence during the implementation of authorized repairs or modifications, (v) if serial numbers are modified or illegible, (vi) anomalies caused by, or connected to, the elements coupled directly by the Buyer or by the final customer, (vii) accidents or events that place the Product outside its storage and operational specification, (viii) continued use of the Products after identification of a fault or defect.

The warranty excludes components that must be replaced periodically such as fuses, lamps & air filters or consumable materials subject to normal wear and tear.

The warranty excludes external parts that are not manufactured by the Seller under the brand of Power Electronics.

The Seller undertakes to replace or to repair, himself, at their discretion, any Product or its part that demonstrates a fault or defect, which is in conformance with the aforementioned terms of the warranty. Reasonable costs associated with the disassembly/assembly, transport and customs of equipment will also be undertaken by the Seller except in cases of approved intervention by the Buyer and/or their representative where cost allocation has been previously agreed.

In case of fault or defect, the Buyer shall notify the Seller in writing by using the following contact email: quality@power-electronics.com, of the presence of any fault or defect within 15 days of the fault or defect event. The serial number of the defective product plus a brief description of the fault must be included in the email. Failure to notify the Seller of fault or defect within this time period may result in the warranty becoming invalid.

In the event of replacement of defective Product or part thereof, the property of the Product or part shall be transferred to the Seller.

The Seller shall bear no liability for damages to property or third persons, even as manufacturer of the Products, other than that expressly provided by virtue of applicable mandatory law provisions. In any case, the Seller shall not be liable for indirect or consequential damages of whatsoever nature as, by way of example, production losses or unearned profits.

The Seller shall, at their discretion, forfeit all warranty rights of the Buyer if the total sum of the contract and payment has not been reached in accordance with the agreed conditions of the contract.

No other warranties, express or implied, are made with respect to the Products including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. In any case, the Buyer's right to damages shall be limited to a maximum amount equal to no more than the price obtained by the Seller of the faulty or defective Products.

These conditions shall apply to any repaired or replacement products. Notwithstanding the above, the replacement of a Product does not imply an extension of the term of warranty outside that of the original term.