

EC

NOVA drives / single phase input

Compact, flexible and energy saving drives customized for high efficiency motor applications



Type	NOVA-200	NOVA-550	NOVA-1100 <small>Planned for release</small>	NOVA-1500 <small>Planned for release</small>	NOVA-XXXX <small>To be decided</small>
OVERALL RATINGS					
Power level	50-200 W	200-550 W	550-1100 W	1100-1500 W	TBD
Efficiency	> 94% @ 230 VAC rms, 50 Hz in; nominal power and current output; Ta 77 °F (25 °C)				
PFC strategy	Passive		Active		
Power factor @ max load	> 0.7 Cos \ominus		> 0,99 Cos \ominus		
INPUT SUPPLY (GRID)					
Nominal voltage	1 x 230 Vrms +/-10%				
Supply connection	Single phase (phase-to-neutral or phase-to-phase) + earth/ground				
Frequency	50 or 60 Hz \pm 2 Hz				
Max input current @ 230V supply	1.5 Arms	3.6 Arms	5.5 Arms	7.5 Arms	TBD
Input fuse size	3 Arms	6 Arms	Min. 9 Arms	Min. 12 Arms	TBD
Minimum supply @ reduced speed	207 Vrms	207 Vrms	184 Vrms	184 Vrms	TBD
Inrush system (Arms)	Limited from internal PFC choke / NTC		PTC/Relay		
Fuse	All NOVA drives includes an PCB fuse on the input				
EMC filter	Integrated				
DRIVE OUTPUT					
Maximum output current	1.0 Arms	2.5 Arms	4.0 Arms	5.8 Arms	TBD
Maximum output frequency	250 Hz (FOC)				
Output voltage	0-230 Vrms (input supply dependent)				
Motor type	Permanent Magnet Synchronous (PMS) motor, Brushless Direct Current (BLDC) motor				
Min. motor control input reference	200 rpm				
Max. motor control input reference	3200 rpm				
Motor control method	Sensorless Field Oriented Control (PMS motor)				
Features	<ul style="list-style-type: none"> - Start on the fly at 50% of nominal speed - Minimum and maximum speed (frequency) - Ramping functions - Stall prevention (only FOC) 				
PROTECTION					
Module temperature protection	Derate: 194 °F (90 °C) Shutdown: 212 °F (100 °C)				
Circuit board temperature protection (enclosure temperature)	Derate: 158 °F (70 °C) Shutdown: 176 °F (80 °C)				
Overcurrent protection on input	2 Arms	4 Arms	6 Arms	8 Arms	TBD
Overcurrent protection on output	1.5 Arms	3 Arms	4.5 Arms	6.5 Arms	TBD
Input over and under voltage	180 Vrms and 265 Vrms				
Motor start in sensorless mode	Restart on failure				
Protection functions	Over/under voltage, temperature and over current				



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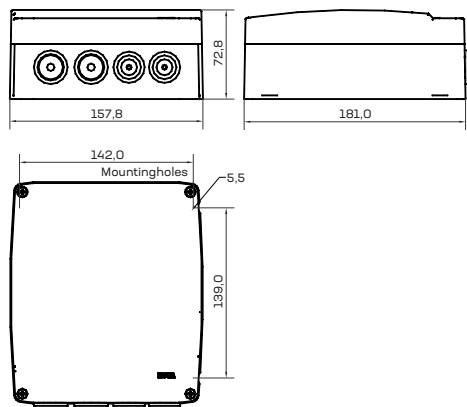
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TYPE	NOVA-200	NOVA-550	NOVA-1100 <small>Planned for release</small>	NOVA-1500 <small>Planned for release</small>	NOVA-2400 <small>Planned for release</small>
CONTROL INTERFACE					
Analog input	0-10 volt				
Analog input impedance	Approx. 15 kOhm				
Digital input	2 x Digital input - On/Off (0-10 volt)				
Communication interface	1 x Modbus (on RS485)				
Control interface alarm	1 x Alarm relay NC/C/NO 2A/250 V~MAX				
Indicators	Red/Green/Yellow LED on PCB (only visible with the enclosure top off)				
Settings	Dipswitch for the Modbus address (address 1 or 2 and motor settings)				
Galvanic isolation	Double layer protection				
AUXILIARY POWER SUPPLY					
Direction	An auxiliary supply is available from the Nova drive				
External auxiliary power supply	10 volt DC (@ input: 230 VAC +/-10%)				
External auxiliary power supply	Maximum 20 mA				
ENCLOSURE					
Material	Aluminium Alloy - No painting - Plastic cover				
Mounting	4 x Ø 5.5 mm holes				
Mounting direction	Vertical				
Protection Ingress	IP 54 standard				
Size (L x W x H)	181 x 158 x 73 mm	181 x 158 x 93 mm	-	-	-
Weight	1.4 kg	1.9 kg	-	-	-
Connections	5 mm and 3.5 mm screw less terminal blocks all over				
Cable fixing/fastening	Metal bar with screws including shielded cable fixing				
Cable entry rubber grommets	2 x M16 2 x M20	2 x M16 2 x M20	3 x M16		2 x M20
GENERAL					
CE	2014/30/EU (EMC) - 2014/35/EU (LVD) - 2006/42/EU (MD) - 2011/65/EC (RoHS)				

NOVA-200:



NOVA-550:

