



Drawing not to scale.

Features	
▪	Compatible with all Technosoft intelligent drives
▪	PNP or NPN command input compatible
▪	V_{MOT} supply: 12...80V _{DC}
▪	Nominal Current Capability: <ul style="list-style-type: none"> ○ No Heatsink: 35A continuous at ambient temperatures up to 40°C ○ With Heatsink: 100A continuous with baseplate temperature below 75°C
▪	Compact size

LED description		
Name	ON Description	OFF Description
ERR	Hardware fault	No error is present
PWR	The module is powered	The module is not powered
ACT	Brake Active: RES- (J1 pin 3) is connected to GND	Brake Inactive: RES- (J1 pin 3) is floating

Mating Connectors		
Ref	Component	Function
J1	High AMP wire. 4mm HEX socket. AWG 6-16 wire gauge. Strip: <ul style="list-style-type: none"> - min 8 mm for cables with isolation diameter less than 6.5 mm; - min 12 mm/ max 15 mm for cables with isolation diameter bigger than 6.5 mm. 	Chopping resistor connection Power Supply connection
Avoid generating metal debris/ filings into drive from the wire leads! In case of multi-stranded wires, a proper crimp ferrule must be used as wire terminal.		

Connectors Description

Pin	Name	Type	Description
1	+V _{MOT}	I	Positive terminal of the motor supply: 12 to 80V _{DC}
2	RES+	O	Positive terminal of the chopping resistor; Internally connected to +V _{MOT}
3	RES-	O	Negative terminal of the chopping resistor; Connects to GND when active; Floating when inactive
4	GND	-	Negative return (ground) of the power supply
5	Earth	-	Earth connection

Pin	Name	Type	Description
1	CMD+	I	Positive input of the command
2	CMD-	I	Negative input of the command
3	Earth	-	Earth connection

The CMD input pins can be connected to NPN or PNP type digital output.

CMD connections	PNP type digital output	
	CMD+	Connect to drive PNP OUT
	CMD-	Connect to drive GND
	NPN type digital output	
CMD+	Connected to drive +V _{LOG} (max. 36V)	
CMD-	Connect to drive NPN OUT	

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Electrical characteristics

Operating Conditions		Min.	Typ.	Max.	Units	
Ambient temperature		0		40 ^{1, 2}	°C	
Ambient humidity		Non-condensing		0	90	%Rh
Altitude / pressure ³	Altitude (vs. sea level)	-0.1	0 ± 2.5			Km
	Ambient Pressure	0 ²	0.75 ± 1	10.0		atm
Storage Conditions		Min	Typ	Max	Units	
Ambient temperature		-40		100		°C
Ambient humidity		Non-condensing		0	100	%Rh
Ambient Pressure		0		10.0		atm
ESD capability (Human body model)	Not powered; applies to any accessible part			±0.5		kV
	Original packaging			±15		kV
Mechanical Mounting		Min	Typ	Max	Units	
External heatsink (cooling plate)	Current capability depends on heat transfer, heatsink dimension, cooling technique (natural or forced). Keep base plate temperature at maximum 75°C .					
Environmental Characteristics		Min.	Typ.	Max.	Units	
Size (Length x Width x Height)		58.6 x 58.9 x 25.8			mm	
		~2.30 x 2.31 x 1.01			inch	
Weight		-			g	
Cleaning agents	Dry cleaning is recommended	Only Water- or Alcohol-based				
Protection degree	According to IEC60529, UL508	IP20			-	
Motor Supply Input (+V _{MOT})		Min.	Typ.	Max.	Units	
Supply voltage	Nominal values	12	80	90	V _{DC}	
	Absolute maximum values, drive operating but outside guaranteed parameters	11		94	V _{DC}	
	Absolute maximum values, surge (duration ≤ 10ms) [†]	-1		95	V	
Utilization Category	Acc. to 60947-4-1 (I _{PEAK} ≤ 4 * I _{NOM})	DC-3				
Current Capability		Min.	Typ.	Max.	Units	
Nominal current	No Heatsink, continuous at ambient temperatures up to 40°C			35	A	
	With Heatsink, continuous with baseplate temperature below 75°C			100	A	
Slow Short-circuit protection	Threshold			240	A	
	Delay		4		µs	
Fast Short-circuit protection	Threshold	105		240	A	
	Delay		1		s	
Automatic Short-circuit protection Reset (Hiccup Mode)			2		s	
Resistance		Min.	Typ.	Max.	Units	
Internal Equivalent Resistance				4.5	mΩ	

¹ Operating temperature at higher temperatures is possible with reduced current and power ratings

² In case of forced cooling (conduction or ventilation): a) the ambient temperature requirements may be extended substantially as long as the drive (PCB) temperature is kept below 85 °C; b) the spacing requirements can be dropped down to zero; c) the surface temperature will decrease accordingly

³ The brake chopper module can be operated in vacuum (no altitude restriction), but at altitudes over 2.500m, current and power rating are reduced due to thermal dissipation efficiency.

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