

150 Series

The 150 Series from Dart is the latest SCR drive offering, designed specifically with the OEM in mind. This drive is complete with all the features the OEM designer may require, with the flexibility to add and subtract features as needed.

Other suppliers have effectively abandoned any development of SCR drives – Dart believes there will always be applications for DC motors and drives. For that reason, Dart has developed specifically for the 150 Series a number of industry unique and innovative features and options, including:

- ✓ 3 choices of wiring terminations
- ✓ Fusing options for line, armature, or BOTH!
- ✓ Encoder tach feedback option **NEW!**
- ✓ Modbus serial communication option **NEW!**
- ✓ IP66/NEMA4X enclosed with DIGITAL POT **NEW!**



RoHS



**pending*



150-E Series



150-C Series



150 Series Features + Specifications

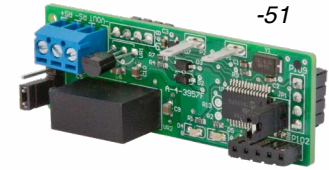
- Dual Voltage 120/240 VAC, 50/60Hz
- Jumper selectable input and output voltage
- $\pm 10\%$ rated line voltage, 50/60Hz operation
- Adjustable horsepower settings
- Auxiliary heat sink doubles HP rating
- Power and Current Limit on-board LED's
- 1/4" male spade terminal connections standard
- Full wave bridge supply; 1% speed regulation
- Adjustable Minimum speed (0–30% of base)
- Adjustable Maximum speed (60–100% of base)
- Adjustable IR Compensation, Current Limit
- Adjustable linear Accel and Decel (D models)
- -10° to +45°C ambient temperature
- Line voltage compensation
- 5K ohm speed potentiometer kit included
- 50:1 speed range
- Overload capacity: 200% for one minute
- Transient voltage protection

Model	Width	Length	Depth	Weight
151-C/ 153-C	3.61 in [9.17 cm]	4.25 in [10.8 cm]	1.295 in [3.29 cm]	0.813 lb [369 gm]
153-E	5.53 in [14.1 cm]	7.25 in [18.42 cm]	2.75 in [6.98 cm]	17.50 oz [486 gm]

Options:



-29B



-51



-TF

Base Model						Options								
Model*	Supply Voltage	Motor Voltage	DC Current	HP	Body	-HSK	-T	-PT	-F1/ F2	-TF	-29B	-51	-55H3	-56H3
151L-12C	120 VAC	0-90 VDC	2 A	1/50-1/8	C	✓	✓	✓	F	N/A	✓	N/A	F	F
151L-100C	120 VAC	0-90 VDC	6 A	1/8-1/2	C	✓	✓	✓	F	N/A	✓	N/A	F	F
153L-25C	120 VAC**	0-90 VDC**	2 A	1/50-1/8	C	✓	✓	✓	F	N/A	✓	N/A	F	F
	240 VAC**	180 VDC**		1/25-1/4										
153L-200C	120 VAC**	0-90 VDC**	6 A	1/50-1/8	C	✓	✓	✓	F	N/A	✓	N/A	F	F
	240 VAC**	180 VDC**		1/25-1/4										
151D-12C	120 VAC	0-90 VDC	2 A	1/50-1/8	C	✓	✓	✓	F	F	✓	N/A	F	F
151D-100C	120 VAC	0-90 VDC	6 A	1/8-1/2	C	✓	✓	✓	F	F	✓	N/A	F	F
153D-25C	120 VAC**	0-90 VDC**	2 A	1/50-1/8	C	✓	✓	✓	F	F	✓	F	F	F
	240 VAC**	180 VDC**		1/25-1/4										
153D-200C	120 VAC**	0-90 VDC**	6 A	1/50-1/2	C	✓	✓	✓	F	F	✓	F	F	F
	240 VAC**	180 VDC**		1/25-1										
153DP-200E	120 VAC**	0-90 VDC**	10 A	1/8-1	E	N/A	S	N/A	N/A	N/A	F	N/A	N/A	N/A
	240 VAC**	180 VDC**		1/4-2										

*D Series models include motor Field supply, ACCEL/DECEL adjustments, & Power/Current Limit LED's. L series do not.

**Supply and Motor voltages are jumper selectable. Ex: both 120 and 240VAC supply may have 90VDC Motor Voltage Output.

C – open chassis
E – NEMA 4X enclosed

✓ - Option is available
S - Standard Feature

N/A – Option Not available
F – Option is available as Factory Installed only

Option Description:

- HSK: Auxiliary heat sink doubles stated HP rating
- T: Euro style terminal strip in place of space terminals
- PT: Pluggable terminal strip
- F1/F2: one (F1) or two (F2) fuse blocks which may be used to fuse AC line, motor armature, or both. Fuses not included
- TF: Tach feedback, improves base speed regulation to +/- 1/2% or better. Uses Dart PU Series encoder, or equivalent
- 29B: 4PDT center block (no pass) switch. Cuts off supply power while changing motor direction
- 51: Modbus RTU serial interface - see product manual for details
- 55H3: Isolated 0-5 to 0-250VDC / 4-20mA signal follower input
- 56H3: Same as -55H3, with provision to add manual speed pot for Auto/Manual operation