

SCR DC
Speed
Controls
5JJ55

DC Motor Speed Controls

PWM DC Speed Controls—Pulse width modulation (PWM) devices adjust voltage pulses to regulate the speed of DC motors. Used for low-voltage devices such as truck-mounted equipment, portable conveyors, and agricultural feeders.

SCR DC Speed Controls—Silicon controlled rectifier (SCR) DC motor controls convert AC voltage to DC voltage, which provides variable speed control for DC motors. Used in applications such as conveyors, packaging equipment, and centrifuges.



Maximum Current	DC Input Voltage	Voltage Output	Rotation	Speed Range	External Switches	Current/Torque Limit	Overall Width	Overall Height	Overall Depth	Brand	Item No.
PWM DC Speed Controls											
Open											
10 A	12 to 48V DC	12 to 48V DC	Single Direction	30:1	None	Adjustable	3.62 in	4.25 in	1.3 in	Dart Controls	38EG40
20 A	12 to 48V DC	12 to 48V DC	Single Direction	30:1	None	Adjustable	3.62 in	4.25 in	1.3 in	Dart Controls	38EG41
40 A	24 to 36V DC	24 to 36V DC	Single Direction	30:1	None	Adjustable	3.7 in	7 in	1.7 in	Dart Controls	2LHT8
40 A	12V DC	12V DC	Single Direction	30:1	None	Adjustable	3.7 in	7 in	1.7 in	Dart Controls	2LHT9
60 A	12V DC	12V DC	Single Direction	30:1	None	Adjustable	6.7 in	9 in	2.27 in	Dart Controls	6VC43
60 A	24 to 36V DC	24 to 36V DC	Single Direction	30:1	None	Adjustable	6.7 in	9 in	2.27 in	Dart Controls	6VC44
Enclosed NEMA 4X											
10 A	12 to 48V DC	12 to 48V DC	Single Direction	30:1	ON/OFF	Adjustable	5.53 in	7.3 in	4.78 in	Dart Controls	38EG42
15 A	12 to 24V DC	12 to 24V DC	Single Direction	30:1	FWD/OFF/REV	Adjustable	5.53 in	7.3 in	4.78 in	Dart Controls	65TK12
20 A	12 to 48V DC	12 to 48V DC	Single Direction	30:1	ON/OFF	Adjustable	5.53 in	7.3 in	4.78 in	Dart Controls	38EG43

Maximum Current	AC Input Voltage	Voltage Output	Rotation	Speed Range	External Switches	Current/Torque Limit	Shunt Wound Voltage	Dynamic Braking	Overall Width	Overall Height	Overall Depth	Brand	Item No.
SCR DC Speed Controls													
Open													
1.2 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	3.63 in	4.25 in	1.3 in	Dart Controls	5DYG9
1.2 A	120V AC	90V DC	Reversible	50:1	None	Adjustable	100V DC	Yes	6.25 in	7 in	4.06 in	Dart Controls	5HA32
1.2 A	240V AC	180V DC	Reversible	50:1	None	Adjustable	200V DC	Yes	6.25 in	7 in	4.06 in	Dart Controls	5HA34
2 A	12/24V AC	12/24V DC	Single Direction	25:1	None	—	10/20V DC	—	2.8 in	3.3 in	1.3 in	Dart Controls	5J53
2 A	12/24V AC	12/24V DC	Single Direction	25:1	None	—	10/20V DC	No	2.8 in	3.3 in	1.5 in	Dart Controls	5J54
2 A	120/240V AC	0 to 90/180V DC	Single Direction	25:1	ON/OFF	None	100/200V DC	No	4.9 in	4 in	2 in	Dayton	4Z827
2 A	120/240V AC	90/180V DC	Single Direction	25:1	None	None	100/200V DC	No	2.8 in	3.3 in	1.3 in	Dart Controls	5J56
2 A	120/240V AC	90/180V DC	Single Direction	25:1	None	None	100/200V DC	No	2.8 in	3.3 in	1.5 in	Dart Controls	5J57
5.5 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	3.63 in	4.25 in	1.3 in	Dart Controls	2LHT4
5.5 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	3.63 in	4.25 in	1.3 in	Dart Controls	2LHT5
5.5 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	3.63 in	4.25 in	1.3 in	Dart Controls	2M510
5.5 A	120V AC	90V DC	Reversible	50:1	None	Adjustable	100V DC	Yes	6.25 in	7 in	4.06 in	Dart Controls	5HA33
5.5 A	240V AC	180V DC	Reversible	50:1	None	Adjustable	200V DC	Yes	6.25 in	7 in	4.06 in	Dart Controls	5HA35
10 A	120/240V AC	90/180V DC	Reversible	50:1	None	Adjustable	100/200V DC	No	5.53 in	7 in	1.63 in	Dart Controls	6Z385
10 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	6.7 in	9 in	2 in	Dart Controls	6Z387
15 A	120/240V AC	90/180V DC	Single Direction	50:1	None	Adjustable	100/200V DC	No	6.7 in	9 in	2 in	Dart Controls	5J59
Enclosed NEMA 4X													
1.2 A	120/240V AC	0 to 90/180V DC	Reversible	50:1	FWD/STOP/REV, ON/OFF	Adjustable	100/200V DC	Yes	5 in	9.5 in	5.5 in	Dayton	6X165
5 A	120/240V AC	0 to 90/180V DC	Single Direction	100:1	None	—	—	No	3.62 in	1.66 in	4.63 in	Dart Controls	1XC92
10 A	120/240V AC	0 to 90/180V DC	Reversible	50:1	FWD/STOP/REV, ON/OFF	Adjustable	100/200V DC	Yes	5 in	9.5 in	5.5 in	Dayton	1F794
10 A	120/240V AC	0 to 90/180V DC	Reversible	50:1	AUTO/MANUAL, FWD/STOP/REV, ON/OFF	Adjustable	100/200V DC	Yes	5 in	9.5 in	5.5 in	Dayton	4Z829
10 A	120/240V AC	0 to 90/180V DC	Single Direction	50:1	ON/OFF	Adjustable	100/200V DC	No	5 in	9.5 in	5.5 in	Dayton	5X485
10 A	120/240V AC	90/180V DC	Single Direction	100:1	ON/OFF	—	—	—	5.13 in	7.4 in	3.9 in	Dart Controls	2LHU2
10 A	120/240V AC	90/180V DC	Single Direction	100:1	None	—	—	—	3.62 in	3.5 in	4.63 in	Dart Controls	2LHU3
Enclosed NEMA 4													
3 A	12/24V AC	12/24V DC	Single Direction	25:1	ON/OFF	—	—	—	3.81 in	3.5 in	5.5 in	Dart Controls	5J55
3 A	120/240V AC	90/180V DC	Single Direction	25:1	ON/OFF	None	100/200V DC	No	3.81 in	3.5 in	5.5 in	Dart Controls	5J58
10 A	120/240V AC	90/180V DC	Single Direction	50:1	ON/OFF	Adjustable	100/200V DC	No	5.53 in	7.25 in	2.75 in	Dart Controls	13A944
10 A	120/240V AC	90/180V DC	Reversible	50:1	FWD/OFF/REV	Adjustable	100/200V DC	No	5.53 in	7.25 in	2.75 in	Dart Controls	2LHT6
10 A	120/240V AC	0 to 90/180V DC	Reversible	50:1	FWD/STOP/REV, ON/OFF	Adjustable	100/200V DC	Yes	5 in	9.5 in	5.5 in	Dayton	2M171
10 A	120/240V AC	90/180V DC	Reversible	50:1	FWD/STOP/REV, ON/OFF	Adjustable	100/200V DC	Yes	6.7 in	10 in	4.75 in	Dart Controls	2M511
10 A	120/240V AC	90/180V DC	Single Direction	50:1	ON/OFF	Adjustable	100/200V DC	No	5.53 in	7.25 in	2.75 in	Dart Controls	6Z386
10 A	120/240V AC	90/180V DC	Single Direction	50:1	ON/OFF	Adjustable	100/200V DC	Yes	6.7 in	10 in	4.75 in	Dart Controls	6Z388
Enclosed NEMA 1													
2 A	120/240V AC	0 to 90/180V DC	Single Direction	25:1	ON/OFF	None	100/200V DC	No	4.25 in	5 in	1.88 in	Dayton	4Z527
2 A	120V AC	0 to 90V DC	Single Direction	25:1	ON/OFF	None	—	No	6 in	6 in	6.38 in	Dayton	5X412
Enclosed IP30													
3 A	120V AC	0 to 90V DC	Single Direction	15:1	None	Adjustable	—	—	2.61 in	3.6 in	3.19 in	Dayton	2PUX3

DC Tachometer and Pulse Generators

Tachometer/Process Meter—Microprocessor-based digital system measure shaft speed lower than 1 rpm and operate as a digital rate meter, timer, or process counter. An onboard microcomputer equipped with sophisticated software, quartz crystal controlled reference frequency, and display updating on every pulse permits accuracy of $\pm 0.04\%$

- 4-digit $\frac{1}{2}$ " LED
- NEMA 4X rating (faceplate with supplied gasket)
- Includes option board for proximity sensor input

Pulse Generators—Provide square-wave pulses with frequency proportional to shaft rpm of unit to which it is mounted. Stainless steel ball bearing, compact Santoprene rubber housing, and 6-ft. rubber-jacketed output cable with 3-wire 18 AWG conductors. Mount directly to motor shaft being monitored using single #10-32 screw.

- Operating temp. range: -10° to 45°C
- Max. shaft speed: 5000 rpm

Input Voltage	Pulses per Revolution	Mfr. Model	Item No.
Tachometer and Process Meter			
120/240VAC	—	DM8000	3VU57
Pulse Generator			
4.5 to 24V DC	1	PU-2E	6Z392
4.5 to 24V DC	10	PU-20E	5J56
4.5 to 24V DC	20	PU-40E	38D074



3VU57



Digital

Potentiometer Kits

Type	Input Voltage	Voltage Output	Display	Includes	Item No.
5K Ohm	—	—	Dial Plate	Dial Plate; 8 $\frac{3}{4}$ in Leads; Knob; Speed Pot	2LHT7
Digital	85 to 265V AC	0 to 24V DC	LED	Gasket Kit for NEMA 4X Panel Installation	2LHU1

