



DC MOTORS

EXPLOSION-PROOF AND WASHGUARD • SCR RATED

NEMA FRAME • EXPLOSION-PROOF FOR HAZARDOUS LOCATIONS

General Specifications:

These explosion-proof motors are designed and approved for application in hazardous environments having certain explosive gases or materials present.



Features:

Rugged mechanical construction meeting all requirements for safety. UL and CSA listed. NEMA 56C face with removable 56 frame base. Leads exit through 3/4"-14NPT pipe-nipple in the top of the motor frame, opposite the shaft end. **Conduit box is not provided.** See optional conduit box below. These motors have pilot-duty thermostats as standard that must be connected to the SCR control. They are rated for continuous duty with full wave SCR (thyristor) controls. Double-shielded, pre-lubricated ball bearings are standard. Easy brush access for field service. These motors are UL and CSA listed.

Application Notes:

These motors must be applied in accordance with the National Electrical Code, Article #500. For a listing of explosive agents, consult NFPA Publication 497M.

NEMA FRAME • WASHGUARD LEESON WASHGUARD

motors are designed for extended life in applications requiring regular washdown as in food processing, or otherwise wet, high humidity environments. WASHGUARD motors retard the entrance of water during cleaning operations and release any water that does enter the motor. Extra protection for the motor's interior prevents rust and corrosion build-up and drains release trapped moisture to insure a longer life than possible with a standard motor.



Mechanical Protection Features:

High quality, corrosion resistant 303 stainless steel shaft plus lubricated spring-loaded contact seals and patented "V" ring Forsheda seal deflect water, protect bearings and the motor's interior. Double sealed, oversized bearings with high temperature moisture resistant lubricant are used.

Frame, base, endshields, armature and interior components protected by enamel and polyester compounds of outstanding adhesion and resistance to moisture, acids, alkalis and oil.

Cast conduit box with threaded entrance, drain holes and tough, high temperature Nitrile gaskets keep water out and resist deflection under high pressure washdowns. Conduit box cover and fan cover, when used, are type 304 stainless steel.

Four drains in each endshield at 3,6,9, and 12 o'clock purge water, and can be repositioned for maximum effectiveness regardless of the motor's mounting. Machined fits are sealed, and nylon gaskets are used to seal bolt heads. Stainless steel data plate.

Chemically inert static free fan is positively positioned on the shaft by opposing flats, shoulder and snap ring arrangement and protected by heavy gauge, stainless steel fan guards. Finished in USDA approved tough white epoxy for superior corrosion resistance and protection against harsh caustic cleaning solutions.

EXPLOSION-PROOF • CLASS I, GROUPS C & D - CLASS II, GROUPS F & G • SCR RATED 90 & 180V C FACE WITH REMOVABLE BASE

HP	Full Load RPM	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/3	1800	S56C	118015.00	27	90	115	3.5	13.41
	1800	S56C	118017.00	32	180	230	2.5	14.41
3/4	1800	S56C	118018.00	40	90	115	7.1	16.41
	1800	S56C	118019.00	36	180	230	3.3	16.41

EXPLOSION-PROOF CONDUIT BOX

UL and CSA listed for Class I, Group C & D, and Class II, Groups F & G locations. Has grounding screw and all hardware provided. Mounts to motor by 3/4"-14NPT opening at rear of box. For NEMA 56 frame motors only.



Catalog Number	App. Wgt. (lbs.)
175026.00	2

WASHGUARD • NEMA C FACE • REMOVABLE BASE TENV • SCR RATED 90 & 180 VOLTS

HP	Full Load RPM	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/4	1800	S56C	108423.00	23	90	115	2.7	10.67
	1800	SS56C	098375.00	21	180	230	1.4	10.22
1/3	1800	S56C	108424.00	26	90	115	3.5	11.67
	1800	SS56C	098376.00	22	180	230	1.7	10.22
1/2	1800	S56C	108226.00	38	90	115	4.9	13.17
	1800	S56C	108227.00	43	180	230	2.4	13.67
3/4	1800	S56C	108228.00	53	90	115	7.0	14.67
	1800	S56C	108229.00	50	180	230	3.5	14.17
1	1800	S56C	108230.00**	45	90	115	10.0	14.82
	1800	S56C	108231.00**	42	180	230	5.0	14.82
1 1/2	1800	S56C	108232.00**	50	180	230	7.6	16.82

WASHGUARD • IEC FRAME • TENV IP55 B5 FLANGE WITH REMOVABLE B3 BASE ▲ SCR RATED 180 VOLTS

Rated HP	Output kW	Full Load RPM	IEC Frame	Catalog Number	App. Wgt. (lbs.)	Arm. Volts DC	F.L. Amps DC	"C" Dim. (Inches)
1/2	.37	1800	71	098040.00 A	22	180	2.5	10.69
3/4	.55	1800	80	108407.00 A	52	180	3.5	16.02

** These motors are totally enclosed fan cooled.

⊗ If base is removed, do not reinstall bolts without using washers to compensate for the thickness of base.

▲ These WASHGUARD motors are modular design but stocked with B5 flange and B3 foot. The foot is removable. The B5 flange can be replaced with a B14 face or other diameter B5 flanges noted on page 157.

A Subject to Availability.

DC MOTORS