



SMV NEMA 1 (IP31)

SMV NEMA 4X (IP65)

DESIGN FEATURES

Superior Performance

- **Modes of Operation**
 - V/Hz (Constant and Variable)
 - Enhanced V/Hz (Constant and Variable)
 - Dynamic Torque Response
 - Sophisticated Auto-tuning (Motor Calibration)
 - Impressive Low Speed Operation

Flexible Power Ranges

- **International Voltages**
 - 120/240V, 1PH (up to 1.5HP)
 - 200/240V, 1/3PH (up to 3HP)
 - 200/240V, 3PH (up to 20HP)
 - 400/480V, 3PH (up to 30HP)
 - 480/600V, 3PH (up to 30HP)

Electronic Programming Module

- **Three ways to program the EPM**
 - SM Vector integrated keypad
 - Microsoft Windows with Techlink or
 - Lightweight, portable EPM programmer
- **Saves time and money**
 - Create and archive your parameter profile
 - Copy parameters to EPM in a matter of seconds
 - Plug EPM into drive and its fully programmed!
- **Improve efficiency**
- **Safeguards your configuration**

Industrial Grade Packaging

- NEMA Type 1 (IP31) Enclosure
- NEMA 4X (IP65) Indoor Only
- NEMA 4X (IP65) Indoor/Outdoor

Simplicity

- Intuitive User Interface
- Electronic Memory Module (EPM)

Applications

- Food Processing Machinery
- Packaging Machinery
- Material Handling/Conveying Systems
- HVAC Systems

Two Year Warranty



Phelan-ElectroMec has the motors and drives your customers require to participate in incentive programs offered by the **Ontario Power Authority**. For more information, **see page 111**.



NEMA 1 (IP31) INDOOR DUTY ONLY—STANDARD INPUT

INPUT LINE VOLTAGE

		120 ¹ or 240V 1 Phase		208 - 240V 1 or 3 Phase		208 - 240V 3 Phase		400 - 480V 3 Phase		480 - 600V 3 Phase	
HP	kW	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST
.33	.25	ESV251N01SXB	\$351	ESV251N02SXB ²	\$333						
.5	.37	ESV371N01SXB	\$375	ESV371N02YXB	\$347			ESV371N04TXB	\$402		
1	.75	ESV751N01SXB	\$419	ESV751N02YXB	\$367			ESV751N04TXB	\$433	ESV751N06TXB	\$496
1.5	1.1	ESV112N01SXB	\$519	ESV112N02YXB	\$410	ESV112N02TXB	\$392	ESV112N04TXB	\$468		
2	1.5			ESV152N02YXB	\$446	ESV152N02TXB	\$422	ESV152N04TXB	\$500	ESV152N06TXB	\$555
3	2.2			ESV222N02YXB	\$567	ESV222N02TXB	\$532	ESV222N04TXB	\$586	ESV222N06TXB	\$640
5	4					ESV402N02TXB	\$633	ESV402N04TXB	\$664	ESV402N06TXB	\$723
7.5	5.5					ESV552N02TXB	\$843	ESV552N04TXB	\$839	ESV552N06TXB	\$906
10	7.5					ESV752N02TXB	\$1,042	ESV752N04TXB	\$1,042	ESV752N06TXB	\$1,118
15	11					ESV113N02TXB	\$1,680	ESV113N04TXB	\$1,688	ESV113N06TXB	\$1,856
20	15					ESV153N02TXB	\$2,064	ESV153N04TXB	\$2,068	ESV153N06TXB	\$2,276
25	18.5							ESV183N04TXB	\$2,457	ESV183N06TXB	\$2,506
30	22							ESV223N04TXB	\$2,790	ESV223N06TXB	\$3,063
40	30							ESV303N04TXB	\$3,102	ESV303N06TXB	\$3,415
50	37							ESV373N04TXB	\$4,261	ESV373N06TXB	\$5,519
60	45							ESV453N04TXB	\$5,185	ESV453N06TXB	\$7,012



NEMA 4X (IP65) INDOOR DUTY ONLY—STANDARD INPUT

INPUT LINE VOLTAGE

		120 ¹ or 240V 1 Phase		208 - 240V 1 or 3 Phase		208 - 240V 3 Phase		400 - 480V 3 Phase		480 - 600V 3 Phase	
HP	kW	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST
.5	.37	ESV371N01SXC	\$527	ESV371N02YXC	\$468			ESV371N04TXC	\$563		
1	.75	ESV751N01SXC	\$594	ESV751N02YXC	\$505			ESV751N04TXC	\$601	ESV751N06TXC	\$649
1.5	1.1	ESV112N01SXC	\$730	ESV112N02YXC	\$590			ESV112N04TXC	\$653		
2	1.5			ESV152N02YXC	\$640			ESV152N04TXC	\$707	ESV152N06TXC	\$774
3	2.2			ESV222N02YXC	\$765			ESV222N04TXC	\$809	ESV222N06TXC	\$891
5	4					ESV402N02TXC	\$953	ESV402N04TXC	\$1,007	ESV402N06TXC	\$1,101
7.5	5.5					ESV552N02TXD	\$1,286	ESV552N04TXC	\$1,265	ESV552N06TXC	\$1,403
10	7.5					ESV752N02TXD	\$1,621	ESV752N04TXD	\$1,512	ESV752N06TXD	\$1,663
15	11					ESV113N02TXD	\$2,342	ESV113N04TXD	\$2,260	ESV113N06TXD	\$2,543
20	15					ESV153N02TXD	\$3,193	ESV153N04TXD	\$3,027	ESV153N06TXD	\$3,301
25	18.5							ESV183N04TXD	\$3,788	ESV183N06TXD	\$4,186
30	22							ESV223N04TXD	\$4,371	ESV222N06TXD	\$4,863



NOTES:

- 120 VAC SINGLE PHASE INPUT PRODUCES 230VAC 3 PHASE OUTPUT
- MODEL ESV251N02SXB IS SINGLE PHASE INPUT ONLY

NEMA 4X (IP65) INDOOR / OUTDOOR—STANDARD INPUT

INPUT LINE VOLTAGE

		120 or 240V 1 Phase		208 - 240V 1 or 3 Phase		208 - 240V 3 Phase		400 - 480V 3 Phase		480 - 600V 3 Phase	
HP	kW	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST	MODEL	LIST
.5	.37	ESV371N01SXE	\$606	ESV371N02YXE	\$547			ESV371N04TXE	\$637		
1	.75	ESV751N01SXE	\$672	ESV751N02YXE	\$581			ESV751N04TXE	\$680	ESV751N06TXE	\$727
1.5	1.1	ESV112N01SXE	\$809	ESV112N02YXE	\$668			ESV112N04TXE	\$730		
2	1.5			ESV152N02YXE	\$714			ESV152N04TXE	\$785	ESV152N06TXE	\$849
3	2.2			ESV222N02YXE	\$843			ESV222N04TXE	\$887	ESV222N06TXE	\$965
5	4					ESV402N02TXF	\$1,090	ESV402N04TXE	\$1,141	ESV402N06TXE	\$1,237
7.5	5.5					ESV552N02TXF	\$1,418	ESV552N04TXE	\$1,403	ESV552N06TXE	\$1,534
10	7.5					ESV752N02TXF	\$1,758	ESV752N04TXF	\$1,645	ESV752N06TXF	\$1,801
15	11					ESV113N02TXF	\$2,505	ESV113N04TXF	\$2,423	ESV113N06TXF	\$2,706
20	15					ESV153N02TXF	\$3,357	ESV153N04TXF	\$3,201	ESV153N06TXF	\$3,466
25	18.5							ESV183N04TXF	\$3,952	ESV183N06TXF	\$4,350
30	22							ESV223N04TXF	\$4,590	ESV223N06TXF	\$5,081



NEMA 4X INDOOR ONLY (IP65) - FILTERED INPUT

NEMA 4X INDOOR/OUTDOOR (IP65)-FILTERED INPUT

INPUT LINE VOLTAGE

		208 - 240V 1 Phase		400 - 480V 3 Phase				208 - 240V 1 Phase		400-480V 3 Phase	
HP	kW	MODEL	LIST	MODEL	LIST	HP	kW	MODEL	LIST	MODEL	LIST
.5	.37	ESV371N02SFC	\$527	ESV371N04TFC	\$636	.5	.37	ESV371N02SFE	\$601	ESV371N04TFE	\$710
1	.75	ESV751N02SFC	\$563	ESV751N04TFC	\$676	1	.75	ESV751N02SFE	\$636	ESV751N04TFE	\$754
1.5	1.1	ESV112N02SFC	\$643	ESV112N04TFC	\$727	1.5	1.1	ESV112N02SFE	\$723	ESV112N04TFE	\$805
2	1.5	ESV152N02SFC	\$695	ESV152N04TFC	\$785	2	1.5	ESV152N02SFE	\$774	ESV152N04TFE	\$860
3	2.2	ESV222N02SFC	\$821	ESV222N04TFC	\$883	3	2.2	ESV222N02SFE	\$898	ESV222N04TFE	\$960
4	3			ESV302N04TFC	\$997	4	3			ESV302N04TFE	\$1,070
5	4			ESV402N04TFC	\$1,105	5	4			ESV402N04TFE	\$1,241
7.5	5.5			ESV552N04TFC	\$1,368	7.5	5.5			ESV552N04TFE	\$1,499
10	7.5			ESV752N04TFD	\$1,612	10	7.5			ESV752N04TFF	\$1,747
15	11			ESV113N04TFD	\$2,608	15	11			ESV113N04TFF	\$2,773
20	15			ESV153N04TFD	\$3,461	20	15			ESV153N04TFF	\$3,639
25	18.5			ESV183N04TFD	\$4,191	25	18.5			ESV183N04TFF	\$4,358
30	22			ESV223N04TFD	\$4,776	30	22			ESV223N04TFF	\$4,993



DYNAMIC BRAKING

Braking modules through 10HP (7.5kW) include the brake resistor and control electronics in one convenient package for panel mounting.



DYNAMIC BRAKING MODULES with BUILT IN RESISTORS					
		MOTOR VOLTAGE			
		208 - 240 V	400 - 480 V	480 - 600 V	
HP	kW	PART #	PART #	PART #	LIST
0.33 - 0.5	0.25 - 0.37	EZXDB3712A1	EZXDB3714A1	N/A	\$148
1 - 1.5	0.75 - 1.1	EZXDB1122A1	EZXDB1124A1	EZXDB1126A1	\$175
2 - 3	1.5 - 2.2	EZXDB2222A1	EZXDB2224A1	EZXDB2226A1	\$237
5	4	EZXDB4022A1	EZXDB4024A1	EZXDB4026A1	\$312
7.5	5.5	EZXDB5522A1	EZXDB5524A1	EZXDB5526A1	\$394
10	7.5	EZXDB7522A1	EZXDB7524A1	EZXDB7526A1	\$477
DYNAMIC BRAKING MODULES without BUILT IN RESISTORS					
15 - 20	11 - 15	EZXDC1532A1	N/A	N/A	\$219
15 - 30	11 - 22	N/A	EZXDC2234A1	EZXDC2236A1	\$219
OPEN DYNAMIC BRAKING MODULES with MOUNTING BRACKETS					
15 - 20	11 - 15	841 - 009	841 - 009	841 - 010	\$230
25 - 30	18.5 - 22	N/A	841 - 011	841 - 012	\$393

REMOTE KEYPAD AND OPTION MODULES

ITEM DESCRIPTION	PART #	LIST
SM VECTOR REMOTE KEYPAD W/DRIVE INTERFACE MODULE AND 8' CABLE - UP TO 10HP (7.5 KW)	ESVZXX1	\$171
SM VECTOR REMOTE KEYPAD WITH 8' CABLE - 15HP (11 KW) AND HIGHER	ESVZXH0	\$124
NEMA 4X TERMINAL COVER WITH INTEGRAL SPEED POTENTIOMETER (W = 6.3 OR 7.1 IN)	ESVZXM1	\$88
NEMA 4X TERMINAL COVER WITH INTEGRAL SPEED POTENTIOMETER (W = 9.0 OR 8.1 IN)	ESVZXM2	\$95
NEMA 4X TERMINAL COVER WITH INTEGRAL SPEED POTENTIOMETER (W = 9.4)	ESVZXM3	\$100
CANOPEN COMMUNICATIONS INTERFACE MODULE	ESVZAC0	\$200
RS485 / MODBUS COMMUNICATIONS INTERFACE MODULE ¹	ESVZAR0	\$161
PROFIBUS COMMUNICATIONS INTERFACE MODULE	ESVZAP0	\$433
DEVICENET COMMUNICATIONS INTERFACE MODULE	ESVZAD0	\$203
ETHERNET/IP COMMUNICATIONS INTERFACE MODULE	ESVZAE0	\$240
ADDITIONAL FORM C RELAY OUTPUT MODULE	ESVZAL0	\$93
ADDITIONAL I/O MODULE: INCLUDES 1 FORM C RELAY AND 2 DIGITAL INPUTS	ESVZAL1	\$113

¹ RS485 interface is standard on ratings 15HP and higher



ELECTRONIC PROGRAMMING MODULE (EPM) PROGRAMMER AND ACCESSORIES

EPM Programmer (includes 4 "D" Cell batteries installed)	EEPM1RA	\$325
EPM Bulk Pack (contains 12 electronic programming modules)	EEPM2BA	\$98



NOTE: Pricing and specifications subject to change without notice.