



The MVSS stainless steel series vibrators are characterized by their total protection from liquids, dusts, aggressive agents and contaminants, thanks to the AISI 304 stainless steel casing and external components.

Line MVSS-P is available for potentially explosive dust atmospheres in conformity with ATEX Directive 94/9/EC.

Technical features

Power supply

Three-phase voltage from 24V to 690V, 50Hz or 60Hz or single-phase 100-130V 60Hz and 200-240V, 50Hz; suitable for use with an inverter from 20Hz to the base frequency with constant torque load profile.

Polarity

2, 4, 6 and 8 poles.

Conformity with European Directives

Low Voltage 2006/95/EC.

Reference Regulations

EN 60034-1.

Functioning

Continual service (S1) at maximum declared centrifugal force and electric power. Intermittent services are also possible depending on the type of vibrator and the operating conditions. For detailed information, contact our technical assistance office.

Centrifugal force

Range extended up to 4300 Kgf. (42.4 KN), with centrifugal force adjustable from 0 to 100%.

Mechanical protection

IP 66 according to IEC 529, EN 60529.

Insulation class

Class F (155°C), class H (180°C) on request.

Tropicalization

Standard on all vibrators, with vacuum encapsulation up to size 35, with "drop by drop" trickle system for larger sizes.

Ambient temperature

From -20°C to +40°C. Versions for higher or lower temperatures are available on request.

Vibrator thermal protection

Standard PTC rated thermistor heat detectors 130°C (DIN 44081-44082) on size 70, on request for smaller sizes. On request, thermistors with different temperatures and anti-condensation heaters.

Fixing of the vibrator

In all positions and therefore without restriction.

Lubrication

All vibrators are lubricated in the factory and do not require further lubrication if used in normal operating conditions ("FOR LIFE" lubrication). In heavy duty operating conditions periodical re-lubrication may be applied to size 35 and larger.

Terminal box

Large fixed electrical connections, with terminal board cover in stainless steel AISI 304. Special shaped terminals allow to fix the power supply cable, protecting it from loosening.

Electric motor

Three-phase and single-phase asynchronous type. Designed for maximum starting torques and torque curves specific to vibrating machines. Insulated windings using vacuum encapsulating up to size 35; using the "drop by drop" trickle system with class H resin for larger sizes. The rotor is die cast aluminium.

Casing

In stainless steel AISI 304, with especially studied design to reduce deposits of dusts and liquids.

Bearing flange

Constructed in cast iron (spheroidal or grey) or in aluminium with steel bearing seat. The geometry of the flange transmits the load to the casing uniformly.

Bearings

The lower and upper bearings have been studied to support the relative load and therefore they have a particular geometry, especially designed and made for Italvibras.

MVSS-P

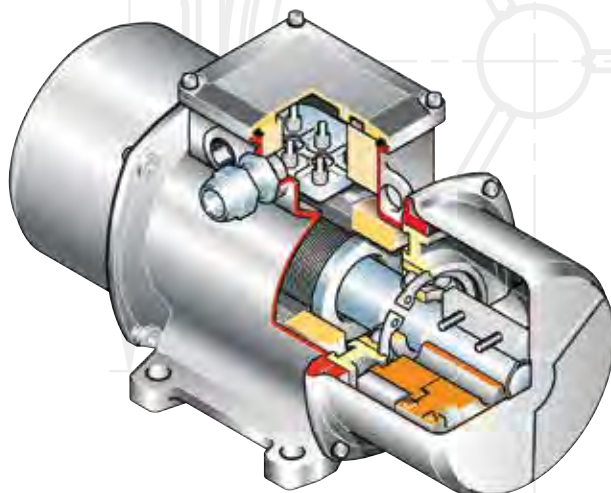
Category: II 2 D

Level of protection: IP66

Temperature class: 120°C

EC certificate: LCIE 03 ATEX 6005 X

Zones of use: 21, 22



Motor shaft

In treated steel alloy (Isothermic hardening) resistant to stress.

Eccentric weights

Allow continual adjustment of the centrifugal force. This adjustment is realized by a graduated scale, which expresses the centrifugal force as a percentage of the maximum centrifugal force. A patented system (patent N° MO98A000194), called ARS, prevents adjustment errors.

Weight covers

In stainless steel AISI 304 with thickness measuring 1.2 to 1.5mm, to unite mechanical resistance to the guaranteed protection of stainless steel.

Surface treatment

Electro polishing of the surface to obtain a smooth, bright, uniform surface.

External screws

In stainless steel AISI 304.

Other features

Identification plate in AISI 316L stainless steel.

Certifications MVSS



Regulation CAN/CSA - C22.2 N. 100-95, file n° LR100948 Class 4211 01 – Motors and generators.



Mechanical protection IP66 (EN 60529), protection against impacts IK 08 (EN 50102)



Certificate GOST-R, standards GOST 16264.1-85, GOST 16264.0-85, GOST R 51689-2000



Comply with the applicable European Union directives

Certifications MVSS-P



II 2 D - Temperature class 120°C - CENELEC EN 50014 - EN 50281-1-1 Certificate n. LCIE 03 ATEX 6005 X



Compliance with applicable European Union directives: Low Voltage 2006/95/CE, ATEX (94/9/CE),

MVSS



CESI KIE



2 poles - 3000/3600 rpm

Description				Mechanical specifications								Electrical specifications				
Code	Type	SIZE	SA*	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz	
three-phase	600328	MVSS 3/100-S02	00	•	12.0	12.0	121	174	1.19	1.71	7.80	7.80	180	180	0.35	0.30
	600329	MVSS 3/200-S02	01	•	21.0	15.0	211	218	2.07	2.14	8.20	8.00	180	180	0.35	0.30
	600330	MVSS 3/300-S02	10	•	30.1	20.4	304	297	2.98	2.91	12.5	12.0	260	270	0.60	0.50
	600331	MVSS 3/500-S02	20	•	49.9	32.4	503	471	4.93	4.62	18.5	17.5	450	500	0.80	0.75
	600515	MVSS 3/800-S08	30	•	78.0	52.0	785	754	7.70	7.40	25.0	24.0	650	685	1.10	1.00
	600333	MVSS 3/1100-S02	35	•	110	73.0	1105	1061	10.8	10.4	30.0	29.0	1000	1200	1.75	1.75
	600334	MVSS 3/1510-S02	40	•	153	102	1545	1483	15.2	14.5	39.6	38.0	1400	1450	2.30	2.00
	600335	MVSS 3/2010-S02	50	•	205	128	2059	1853	20.2	18.2	48.7	46.3	2200	2200	3.50	3.00
single-phase	600328	MVSS 3/100-S02	00	•	12.0	12.0	121	174	1.19	1.71	7.80	7.80	165	165	0.75	1.52
	600329	MVSS 3/200-S02	01	•	21.0	15.0	211	218	2.07	2.14	8.20	8.00	165	165	0.75	1.52
	600330	MVSS 3/300-S02	10	•	30.1	20.4	304	297	2.98	2.91	12.5	12.0	280	280	1.25	2.40
	600331	MVSS 3/500-S02	20	•	49.9	32.4	503	471	4.93	4.62	18.5	17.5	500	500	2.30	4.50
	600515	MVSS 3/800-S08	30	•	78.0	52.0	785	754	7.70	7.40	25.0	24.0	700	750	3.25	7.00

* Working moment = 2 x static moment.

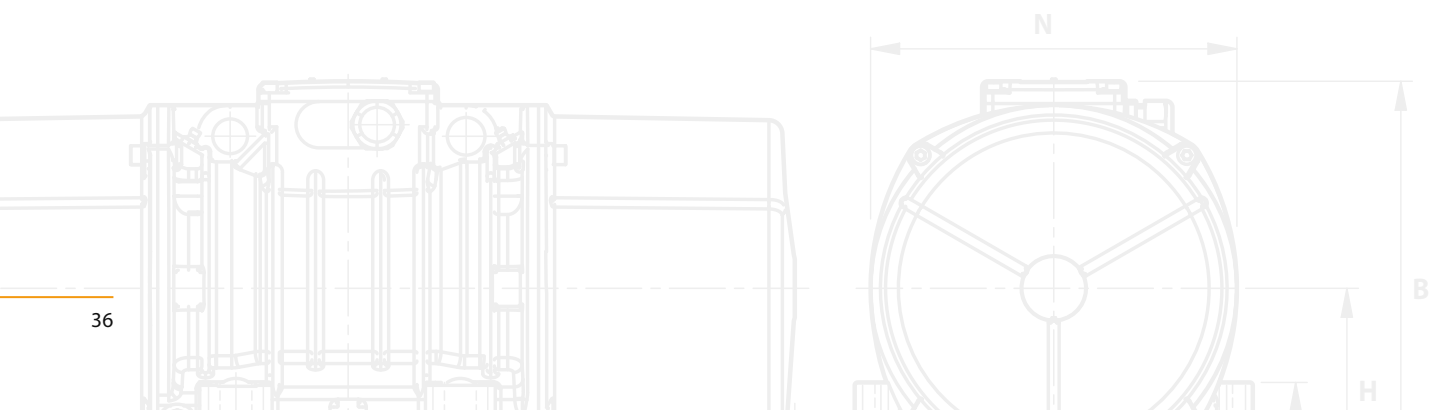
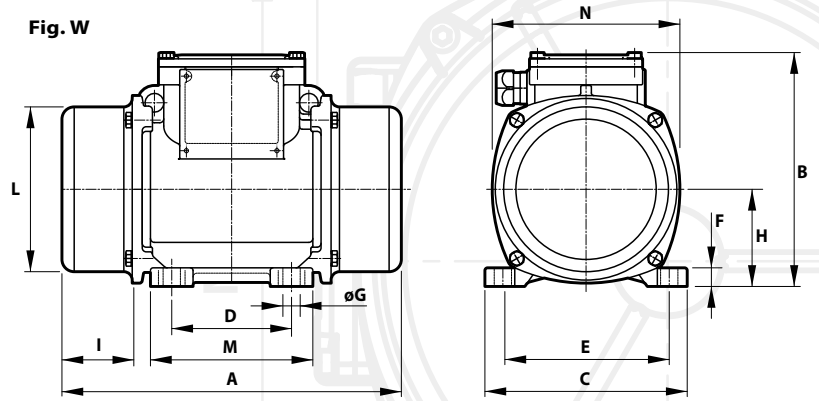


Fig. W



Dimensional specifications (mm)

I _A /I _N		Type	Fig.	A	B	C	D	E	Holes			F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
50 Hz	60 Hz								øG	N°	220 V 50 Hz							115 V 60 Hz		
2.68	3.00	MVSS 3/100-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	102	117	-	-	M20x1.5	
2.68	3.00	MVSS 3/200-S02	W	225	151	125	62-74**	106	9	4	10	61	53	100	102	117	-	-	M20x1.5	
3.47	4.20	MVSS 3/300-S02	W	255	176	152	90	125	13	4	12	73	54	124	122	141	-	-	M20x1.5	
4.21	4.80	MVSS 3/500-S02	W	284	200	167	105	140	13	4	15	82.5	63	143	137	160	-	-	M25x1.5	
3.83	6.00	MVSS 3/800-S08	W	308	205	205	120	170	17	4	17	93.5	63	168	160	182	-	-	M25x1.5	
3.63	4.00	MVSS 3/1100-S02	W	354	232	205	120	170	17	4	20	104.5	77	181	162	203	-	-	M25x1.5	
4.95	6.12	MVSS 3/1510-S02	W	438	245	230	140	190	17	4	25	116	103	201	180	225	-	-	M25x1.5	
4.62	6.00	MVSS 3/2010-S02	W	438	245	230	140	190	17	4	25	116	103	201	180	225	-	-	M25x1.5	
1.67	2.24	MVSS 3/100-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	102	117	10	28	M20x1.5	
1.67	2.24	MVSS 3/200-S02	W	255	151	125	62-74**	106	9	4	10	61	53	100	102	117	10	28	M20x1.5	
2.48	3.52	MVSS 3/300-S02	W	255	176	152	90	125	13	4	12	73	54	124	122	141	16	25	M20x1.5	
3.35	4.22	MVSS 3/500-S02	W	284	200	167	105	140	13	4	15	82.5	63	143	137	160	12.5	50	M25x1.5	
4.00	4.14	MVSS 3/800-S08	W	308	205	205	120	170	17	4	17	93.5	63	168	160	182	25	90	M25x1.5	

I_A/I_N = ratio between start-up current and maximum current. ** Slot.

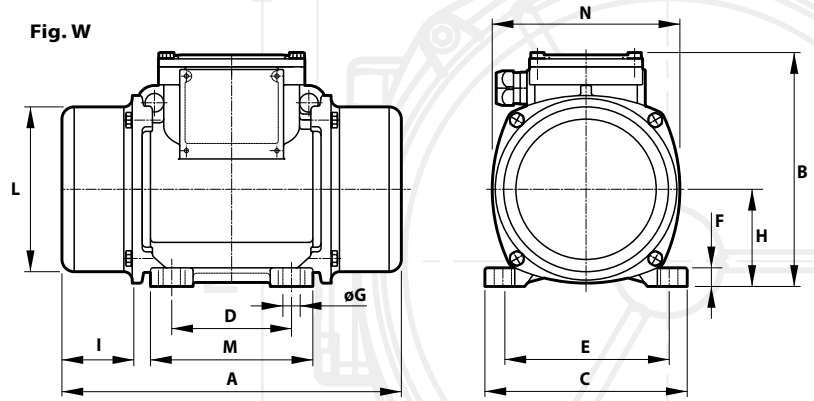
4 poles - 1500/1800 rpm

Description				Mechanical specifications								Electrical specifications				
Code	Type	SIZE	SA*	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz	
three-phase	601342	MVSS 15/35-S02	00	•	12.0	12.0	30.2	43.5	0.30	0.43	7.80	7.80	85	95	0.21	0.20
	601343	MVSS 15/80-S02	01	•	31.0	21.0	77.9	76.1	0.76	0.75	9.00	8.70	85	95	0.21	0.20
	601365	MVSS 15/100-S02	01	•	38.9	31.0	97.9	112	0.96	1.10	9.40	9.00	85	95	0.21	0.20
	601344	MVSS 15/200-S02	10	•	84.2	58.8	213	214	2.09	2.10	15.8	15.0	170	170	0.41	0.40
	601345	MVSS 15/400-S02	20	•	163	113	412	411	4.04	4.03	22.5	21.7	300	350	0.60	0.60
	601346	MVSS 15/550-S02	20	•	219	163	552	592	5.42	5.81	23.9	22.5	300	350	0.60	0.60
	601526	MVSS 15/700-S08	30	•	286	209	720	760	7.06	7.46	32.0	30.7	525	665	0.92	0.98
	601348	MVSS 15/1100-S02	35	•	415	271	1045	982	10.3	9.63	42.0	37.5	550	680	0.95	0.95
	601349	MVSS 15/1410-S02	40	•	561	400	1413	1449	13.9	14.2	53.0	50.0	900	1050	1.45	1.50
	601350	MVSS 15/1710-S02	50	•	715	485	1798	1757	17.6	17.2	58.5	54.5	1100	1200	2.00	1.90
	601351	MVSS 15/2000-S02	50	•	817	561	2054	2033	20.1	19.9	70.0	68.0	1350	1450	2.50	2.30
	601352	MVSS 15/2410-S02	60	•	962	674	2420	2444	23.7	24.0	82.0	76.0	1600	1700	3.20	3.00
	601353	MVSS 15/3000-S02	60	•	1235	858	3106	3107	30.5	30.5	92.0	89.0	1900	2000	3.80	3.50
	601354	MVSS 15/3810-S02	70	•	1526	1034	3840	3744	37.7	36.7	115	110	2200	2500	3.90	3.90
	601363	MVSS 15/4300-S02	70	•	1720	1173	4326	4250	42.4	41.7	122	117	2500	2800	4.80	4.65
single-phase	601342	MVSS 15/35-S02	00	•	12.0	12.0	30.2	43.5	0.30	0.43	7.80	7.80	90	100	0.43	1.00
	601343	MVSS 15/80-S02	01	•	31.0	21.0	77.9	76.1	0.76	0.75	9.00	8.70	90	100	0.43	1.00
	601365	MVSS 15/100-S02	01	•	38.9	31.0	97.9	112	0.96	1.10	9.40	9.00	90	100	0.43	1.00
	601344	MVSS 15/200-S02	10	•	84.2	58.8	213	214	2.09	2.10	15.8	15.0	210	230	1.00	2.00
	601345	MVSS 15/400-S02	20	•	163	113	412	411	4.04	4.03	22.5	21.7	240	320	1.20	2.80
	601346	MVSS 15/550-S02	20	•	219	163	552	592	5.42	5.81	23.9	22.5	240	320	1.20	2.80
	601526	MVSS 15/700-S08	30	•	286	209	720	760	7.06	7.46	25.0	23.0	450	550	2.15	5.15

* Working moment = 2 x static moment.



Fig. W



Dimensional specifications (mm)

I _A /I _N		Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Capacitor (µF)		Cable entry thread
50 Hz	60 Hz								øG	N°							220 V 50 Hz	115 V 60 Hz	
1.78	1.95	MVSS 15/35-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	102	117	-	-	M20x1.5
1.78	1.95	MVSS 15/80-S02	W	225	151	125	62-74**	106	9	4	10	61	53	100	102	117	-	-	M20x1.5
1.78	1.95	MVSS 15/100-S02	W	^{241 (50Hz)} _{225 (60Hz)}	151	125	62-74**	106	9	4	10	61	^{61 (50Hz)} _{53 (60Hz)}	100	102	117	-	-	M20x1.5
2.34	2.75	MVSS 15/200-S02	W	295	176	152	90	125	13	4	12	73	74	124	122	141	-	-	M20x1.5
3.33	3.50	MVSS 15/400-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	-	-	M25x1.5
3.33	3.50	MVSS 15/550-S02	W	380	200	167	105	140	13	4	15	82.5	111	143	137	160	-	-	M25x1.5
3.48	3.43	MVSS 15/700-S08	W	378	205	205	120	170	17	4	17	93.5	98	168	160	182	-	-	M25x1.5
4.45	4.89	MVSS 15/1100-S02	W	436	232	205	120	170	17	4	20	104.5	118	181	162	203	-	-	M25x1.5
4.10	4.20	MVSS 15/1410-S02	W	438	245	230	140	190	17	4	25	116	103	201	180	225	-	-	M25x1.5
4.29	4.89	MVSS 15/1710-S02	W	490	245	230	140	190	17	4	25	116	129	201	180	225	-	-	M25x1.5
4.30	4.90	MVSS 15/2000-S02	W	560	245	230	140	190	17	4	25	116	164	201	180	225	-	-	M25x1.5
6.09	7.23	MVSS 15/2410-S02	W	525	285	275	155	225	22	4	30	135	131	231	205	253	-	-	M25x1.5
6.50	7.50	MVSS 15/3000-S02	W	601	285	275	155	225	22	4	30	135	169	231	205	253	-	-	M25x1.5
7.11	6.92	MVSS 15/3810-S02	W	589	323	310	155	255	23.5	4	35	155	139.5	269	215	295	-	-	M25x1.5
5.90	7.10	MVSS 15/4300-S02	W	589	323	310	155	255	23.5	4	35	155	139.5	269	215	295	-	-	M25x1.5
1.20	1.30	MVSS 15/35-S02	W	209	151	125	62-74**	106	9	4	10	61	45	100	102	117	3.15	25	M20x1.5
1.20	1.30	MVSS 15/80-S02	W	225	151	125	62-74**	106	9	4	10	61	53	100	102	117	3.15	25	M20x1.5
1.20	1.30	MVSS 15/100-S02	W	^{241 (50Hz)} _{225 (60Hz)}	151	125	62-74**	106	9	4	10	61	^{61 (50Hz)} _{53 (60Hz)}	100	102	117	3.15	25	M20x1.5
1.50	1.85	MVSS 15/200-S02	W	295	176	152	90	125	13	4	12	73	74	124	122	141	5	25	M20x1.5
2.50	2.21	MVSS 15/400-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	32/12 ◯	35	M25x1.5
2.50	2.21	MVSS 15/550-S02	W	380	200	167	105	140	13	4	15	82.5	111	143	137	160	32/12 ◯	40/35 ◯	M25x1.5
5.44	3.63	MVSS 15/700-S08	W	378	205	205	120	170	17	4	17	93.5	98	168	160	182	96/16 ◯	160/40 ◯	M25x1.5

I_A/I_N = ratio between start-up current and maximum current. ** Slot. ◯ Start-up capacitor / Running capacitor.

6 poles - 1000/1200 rpm

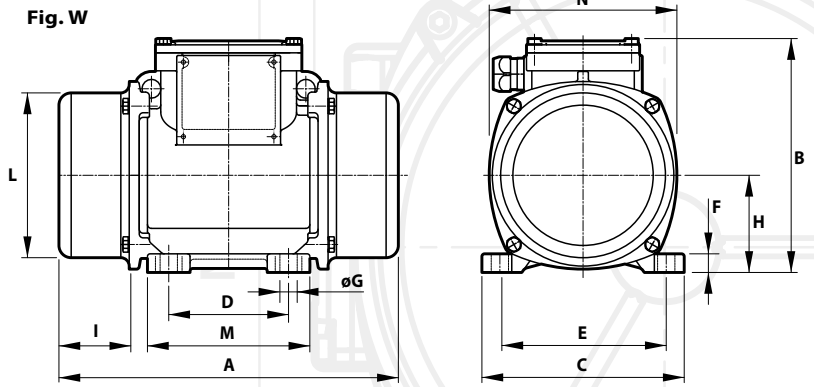
Description				Mechanical specifications								Electrical specifications				
Code	Type	SIZE	SF®	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz	
three-phase	602283	MVSS 10/40-S02	10	•	30.1	30.1	35	49	0.33	0.47	12.5	12.5	120	135	0.30	0.30
	602284	MVSS 10/100-S02	10	•	84.2	84.2	94.3	136	0.93	1.33	15.8	15.8	120	135	0.30	0.30
	602285	MVSS 10/200-S02	20	•	163	163	183	264	1.80	2.59	22.5	22.5	185	205	0.50	0.50
	602405	MVSS 10/310-S08	30	•	286	209	321	338	3.15	3.32	32.0	30.0	350	380	0.72	0.68
	602417	MVSS 10/550-S08	35	•	457	457	512	737	5.02	7.23	41.0	41.0	350	380	0.75	0.68
	602408	MVSS 10/810-S08	40	•	723	561	809	905	7.84	8.88	54.0	52.6	680	760	1.40	1.35
	602409	MVSS 10/1110-S08	50	•	1012	715	1132	1151	11.1	11.3	67.0	59.5	750	750	1.65	1.50
	602410	MVSS 10/1400-S08	50	•	1274	904	1424	1485	14.0	14.5	78.0	71.0	950	1000	1.80	1.70
	602411	MVSS 10/1610-S08	60	•	1464	962	1638	1549	16.1	15.2	94.0	83.0	1100	1300	2.20	2.20
	602412	MVSS 10/2100-S08	60	•	1927	1318	2154	2102	21.1	20.6	105	93.0	1500	1700	3.00	2.90
	602293	MVSS 10/2610-S02	70	•	2326	1706	2601	2747	25.5	26.9	130	116	1960	2100	4.10	3.75
602294	MVSS 10/3000-S02	70	•	2690	1940	3007	3124	29.5	30.6	145	130	2200	2400	4.50	4.30	

8 poles - 750/900 rpm

Description				Mechanical specifications								Electrical specifications				
Code	Type	SIZE	SF®	Static moment* kgmm		Centrifugal force				Weight kg		Max input power W		Max. current A		
				50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	400 V 50 Hz	460 V 60 Hz	
three-phase	602561	MVSS 075/150-S02	20	•	163	163	104	149	1.02	1.46	22.5	22.5	230	250	0.85	0.76
	602617	MVSS 075/250-S08	30	•	286	286	181	260	1.76	2.55	32.0	32.0	350	380	1.10	1.05
	602647	MVSS 075/260-S08	35	•	275	275	174	250	1.71	2.45	34.5	34.5	375	410	0.81	0.80
	602627	MVSS 075/400-S08	35	•	457	457	288	415	2.83	4.07	41.0	41.0	375	410	0.81	0.80
	602620	MVSS 075/660-S08	40	•	723	723	456	656	4.47	6.44	54.0	54.0	400	450	1.20	1.20
	602621	MVSS 075/910-S08	50	•	1012	1012	637	917	6.25	9.00	67.0	67.0	400	500	1.40	1.30
	602622	MVSS 075/1310-S08	60	•	1464	1464	922	1327	9.04	13.0	94.0	94.0	950	1100	2.20	2.20
	602567	MVSS 075/2110-S02	70	•	2326	2326	1463	2107	14.4	20.7	130	130	1500	1790	4.10	4.20

* Working moment = 2 x static moment.





Dimensional specifications (mm)

I_A/I_N		Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread
50 Hz	60 Hz								ϕG	N°							
1.90	2.07	MVSS 10/40-S02	W	255	176	152	90	125	13	4	12	73	54	124	122	141	M20x1.5
1.90	2.07	MVSS 10/100-S02	W	295	176	152	90	125	13	4	12	73	74	124	122	141	M20x1.5
2.72	3.10	MVSS 10/200-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	M25x1.5
2.63	2.79	MVSS 10/310-S08	W	378	205	205	120	170	17	4	17	93.5	98	168	160	182	M25x1.5
2.53	3.68	MVSS 10/550-S08	W	436	232	205	120	170	17	4	20	104.5	118	181	162	203	M25x1.5
2.79	3.33	MVSS 10/810-S08	W	490 (50Hz) 438 (60Hz)	245	230	140	190	17	4	25	116	129 (50Hz) 103 (60Hz)	201	180	225	M25x1.5
3.33	4.13	MVSS 10/1110-S08	W	560	245	230	140	190	17	4	25	116	164	201	180	225	M25x1.5
3.05	3.65	MVSS 10/1400-S08	W	560	245	230	140	190	17	4	25	116	164	201	180	225	M25x1.5
4.21	4.05	MVSS 10/1610-S08	W	601 (50Hz) 525 (60Hz)	285	275	155	225	22	4	30	135	169 (50Hz) 131 (60Hz)	231	205	253	M25x1.5
4.50	4.20	MVSS 10/2100-S08	W	655 (50Hz) 601 (60Hz)	285	275	155	225	22	4	30	135	196 (50Hz) 169 (60Hz)	231	205	253	M25x1.5
5.35	5.60	MVSS 10/2610-S02	W	657 (50Hz) 589 (60Hz)	323	310	155	255	23.5	4	35	155	173.5 (50Hz) 139.5 (60Hz)	269	215	295	M25x1.5
4.35	4.81	MVSS 10/3000-S02	W	706	323	310	155	255	23.5	4	35	155	198	269	215	295	M25x1.5

Dimensional specifications (mm)

I_A/I_N		Type	Fig.	A	B	C	D	E	Holes		F	H	I	L	M	N	Cable entry thread
50 Hz	60 Hz								ϕG	N°							
2.13	2.11	MVSS 075/150-S02	W	340	200	167	105	140	13	4	15	82.5	91	143	137	160	M25x1.5
2.03	2.29	MVSS 075/250-S08	W	378	205	205	120	170	17	4	17	93.5	98	168	160	182	M25x1.5
2.22	2.94	MVSS 075/260-S08	W	354	232	205	120	170	17	4	20	104.5	77	181	162	182	M25x1.5
2.22	2.38	MVSS 075/400-S08	W	436	232	205	120	170	17	4	20	104.5	118	181	162	203	M25x1.5
2.38	2.58	MVSS 075/660-S08	W	490	245	230	140	190	17	4	25	116	129	201	180	225	M25x1.5
2.38	2.85	MVSS 075/910-S08	W	560	245	230	140	190	17	4	25	116	164	201	180	225	M25x1.5
2.63	3.41	MVSS 075/1310-S08	W	601	285	275	155	225	22	4	30	135	169	231	205	253	M25x1.5
3.55	2.95	MVSS 075/2110-S02	W	657	323	310	155	255	23.5	4	35	155	173.5	269	215	295	M25x1.5

I_A/I_N = ratio between start-up current and maximum current.