

Motorsol Soft Starter

Ordering

LSFS Low Voltage

LSFS	2	002	S																																																						
LS Soft Starters	Rated voltage (Vac)	Motor power (kW)	Version																																																						
	<table border="1"> <tr><td>2</td><td>220</td></tr> <tr><td>3</td><td>380</td></tr> <tr><td>4</td><td>440</td></tr> </table>	2	220	3	380	4	440	<table border="1"> <tr><td>002</td><td>2.2</td><td>098</td><td>98</td></tr> <tr><td>003</td><td>3.7</td><td>112</td><td>112</td></tr> <tr><td>005</td><td>5.5</td><td>150</td><td>150</td></tr> <tr><td>007</td><td>7.5</td><td>187</td><td>187</td></tr> <tr><td>011</td><td>11</td><td>195</td><td>195</td></tr> <tr><td>015</td><td>15</td><td>225</td><td>225</td></tr> <tr><td>022</td><td>22</td><td>240</td><td>240</td></tr> <tr><td>030</td><td>30</td><td>300</td><td>300</td></tr> <tr><td>037</td><td>37</td><td>375</td><td>375</td></tr> <tr><td>056</td><td>56</td><td>450</td><td>450</td></tr> <tr><td>075</td><td>75</td><td>600</td><td>600</td></tr> </table>	002	2.2	098	98	003	3.7	112	112	005	5.5	150	150	007	7.5	187	187	011	11	195	195	015	15	225	225	022	22	240	240	030	30	300	300	037	37	375	375	056	56	450	450	075	75	600	600	<table border="1"> <tr><td>S</td><td>One-way</td></tr> <tr><td>BPS</td><td>By-Pass</td></tr> </table>	S	One-way	BPS	By-Pass
2	220																																																								
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007	7.5	187	187																																																						
011	11	195	195																																																						
015	15	225	225																																																						
022	22	240	240																																																						
030	30	300	300																																																						
037	37	375	375																																																						
056	56	450	450																																																						
075	75	600	600																																																						
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BPS	By-Pass																																																								

* 2.2, 98, 187 and 225kW are available for rated voltage 220V

LSFS 2002 S	C	1	0	0																				
	Communication	Control power (Vac)	Display unit	Cable length (m)																				
	<table border="1"> <tr><td>C</td><td>Comm.</td></tr> <tr><td>0</td><td>No comm.</td></tr> </table>	C	Comm.	0	No comm.	<table border="1"> <tr><td>1</td><td>110</td></tr> <tr><td>2</td><td>220</td></tr> </table>	1	110	2	220	<table border="1"> <tr><td>0</td><td>Combination</td></tr> <tr><td>1</td><td>Separate</td></tr> </table>	0	Combination	1	Separate	<table border="1"> <tr><td>0</td><td>0</td></tr> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td></tr> </table>	0	0	1	1	2	2	3	3
C	Comm.																							
0	No comm.																							
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2	2																							
3	3																							



Note :
The option of cable length is for display separated.
In case of combination type the cable length is 0m.

Motorsol Soft Starter

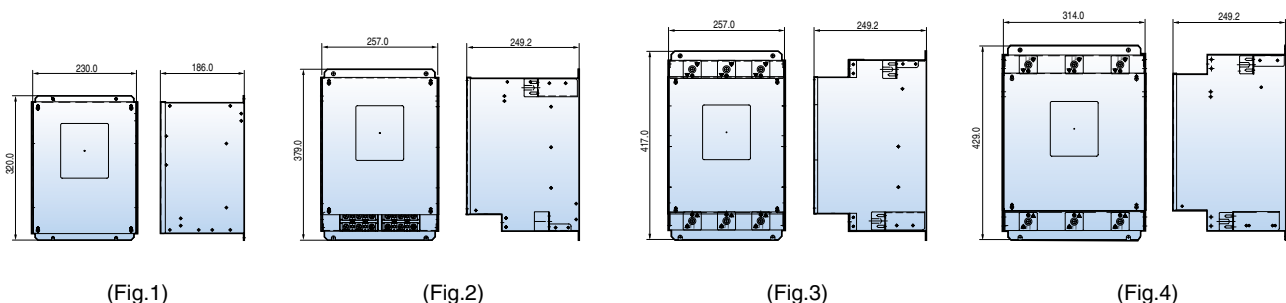
Specifications

LSFS One-way

Motor power		2.2 kW	3.7 kW	5.5 kW	7.5 kW	11 kW	15 kW	22 kW	30 kW	37 kW
Rated voltage	220V	LSFS 2002 S	LSFS 2003 S	LSFS 2005 S	LSFS 2007 S	LSFS 2011 S	LSFS 2015 S	LSFS 2022 S	LSFS 2030 S	LSFS 2037 S
	380V	-	LSFS 3003 S	LSFS 3005 S	LSFS 3007 S	LSFS 3011 S	LSFS 3015 S	LSFS 3022 S	LSFS 3030 S	LSFS 3037 S
	440V	-	LSFS 4003 S	LSFS 4005 S	LSFS 4007 S	LSFS 4011 S	LSFS 4015 S	LSFS 4022 S	LSFS 4030 S	LSFS 4037 S
Max. rated operational current	220V AC [A]	9	15	22	30	45	60	88	120	150
	380/440V AC [A]	-	7.5	11	15	22	30	45	60	75
Starting current	220/380V AC [A]	36	60/30	88/44	120/60	180/88	240/120	352/180	480/240	600/300
Rated frequency	[Hz]	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Size	220V	W [mm]	230				257		257	
		H [mm]	320(Fig.1)				379(Fig.2)		417(Fig.3)	
		D [mm]	186				249		249	
	380/440V	W [mm]	-	230				257		
		H [mm]	-	320(Fig.1)				379(Fig.2)		
		D [mm]	-	186				249		
Usage place	Indoor (Place without corrosive gas, dust, etc)									
Temperature	-10 ~ +50°C									
Humidity	Under 90% RH (no dew)									
Power noise	Square wave input by noise simulator Rphase, T phase $\pm 2000V$ 1 μs (between power terminals)									
Cooling type	Natural cooling by heat sink and compulsory cooling using heat sink and fan									
Over heat sensor	Thermostatic sensor operation, operation temperature 85°C \pm 5°C									
Insulation resistance	Over 1000V, 5M Ω									
Standard	EN 61131-2, EN 50178									

* For product quality improvement, external dimension might be changed without prior notice. Please inquire it when you make and order.
2.2, 98, 187, 225kW are provided only for 220V

Dimension



Motorsol Soft Starter

56 kW	75 kW	98 kW	112 kW	150 kW	187 kW	195 kW	225 kW	240 kW	300 kW	375 kW	450 kW	600 kW
LSFS 2056 S	LSFS 2075 S	LSFS 2098 S	LSFS 2112 S	LSFS 2150 S	LSFS 2187 S	-	LSFS 2225 S	-	-	-	-	-
LSFS 3056 S	LSFS 3075 S	-	LSFS 3112 S	LSFS 3150 S	-	LSFS 3195 S	-	LSFS 3240 S	LSFS 3300 S	LSFS 3375 S	LSFS 3450 S	LSFS 3600 S
LSFS 4056 S	LSFS 4075 S	-	LSFS 4112 S	LSFS 4150 S	-	LSFS 4195 S	-	LSFS 4240 S	LSFS 4300 S	LSFS 4375 S	LSFS 4450 S	LSFS 4600 S
225	300	390	450	600	740	-	900	-	-	-	-	-
112	150	-	225	300	-	390	-	480	600	750	900	1200
900/445	1200/600	1560	1800/900	2400/1200	2960	1560	3600	1920	2400	3000	3600	4800
50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	
314	344		468				468					
429(Fig. 4)	483(Fig.5)		758(Fig.6)			-	758(Fig.6)	-	-	-	-	-
250	279		308				308					
257		314			344			344	468		620	
417(Fig.3)	-	429(Fig.3)		-	483(Fig.5)		-	483(Fig.5)	758(Fig.6)		872(Fig.7)	
249		250			279			279	308		374	

Indoor (Place without corrosive gas, dust, etc)

-10 ~ +50°C

Under 90% RH (no dew)

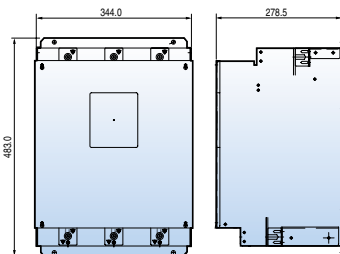
Square wave input by noise simulator Rphase, T phase ±2000V 1μs(between power terminals)

Natural cooling by heat sink and compulsory cooling using heat sink and fan

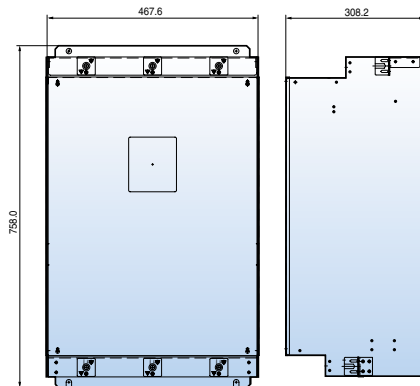
Thermostatic sensor operation, operation temperature 85°C ± 5°C

Over 1000V, 5MΩ

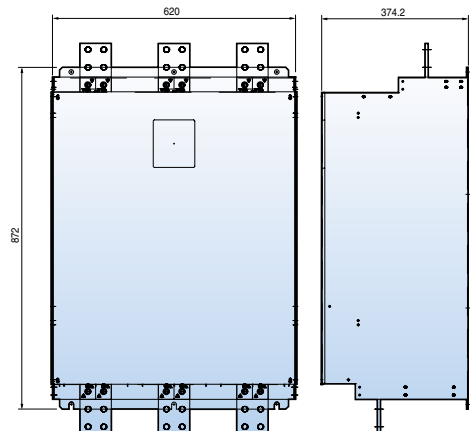
EN 61131-2, EN 50178



(Fig.5)



(Fig.6)



(Fig.7)

Motorsol Soft Starter

Specifications

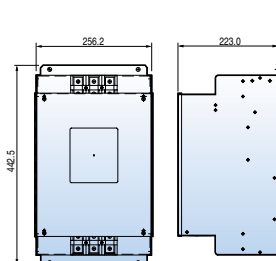
LSFS By-pass

Motor power		2.2 kW	3.7 kW	5.5 kW	7.5 kW	11 kW	15 kW	22 kW	
Rated voltage	220V	LSFS 2002 BPS	LSFS 2003 BPS	LSFS 2005 BPS	LSFS 2007 BPS	LSFS 2011 BPS	LSFS 2015 BPS	LSFS 2022 BPS	
	380V	-	LSFS 3003 BPS	LSFS 3005 BPS	LSFS 3007 BPS	LSFS 3011 BPS	LSFS 3015 BPS	LSFS 3022 BPS	
	440V	-	LSFS 4003 BPS	LSFS 4005 BPS	LSFS 4007 BPS	LSFS 4011 BPS	LSFS 4015 BPS	LSFS 4022 BPS	
Max. rated operational current	220V AC [A]	9	15	22	30	45	60	88	
	380/440V AC [A]	-	7.5	11	15	22	30	45	
Starting current	220/380V AC [A]	36	60/30	88/44	120/60	180/88	240/120	352/180	
Rated frequency	[Hz]	50/ 60	50/60	50/60	50/60	50/60	50/60	50/60	
Size	220V	W [mm]	256						
		H [mm]	442(Fig.1)						
		D [mm]	224						
	380/440V	W [mm]	-	256					
		H [mm]		442(Fig.1)					
		D [mm]		224					
Usage place	Indoor (Place without corrosive gas, dust, etc)								
Temperature	-10 ~ +50°C								
Humidity	Under 90% RH (no dew)								
Power noise	Square wave input by noise simulator Rphase, T phase $\pm 2000V$ 1 μs (between power terminals)								
Cooling type	Natural cooling by heat sink and compulsory cooling using heat sink and fan								
Over heat sensor	Thermostatic sensor operation, operation temperature 85°C \pm 5°C								
Insulation resistance	Over 1000V, 5M Ω								
Standard	EN 61131-2, EN 50178								

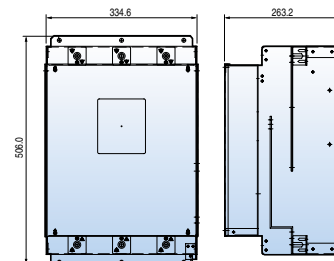
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* 2.2, 98kW are provided only for 220V

Dimension



(Fig.1)



(Fig.2)

Motorsol Soft Starter

30 kW	37 kW	56 kW	75 kW	98 kW	112 kW	150 kW	195 kW	240 kW	300 kW
LSFS 2030 BPS	LSFS 2037 BPS	LSFS 2056 BPS	LSFS 2075 BPS	LSFS 2098 BPS	LSFS 2112 BPS	-	-	-	-
LSFS 3030 BPS	LSFS 3037 BPS	LSFS 3056 BPS	LSFS 3075 BPS	-	LSFS 3112 BPS	LSFS 3150 BPS	LSFS 3195 BPS	LSFS 3240 BPS	LSFS 3300 BPS
LSFS 4030 BPS	LSFS 4037 BPS	LSFS 4056 BPS	LSFS 4075 BPS	-	LSFS 4112 BPS	LSFS 4150 BPS	LSFS 4195 BPS	LSFS 4240 BPS	LSFS 4300 BPS
120	150	225	300	390	450	600	-	-	-
60	75	112	150	-	225	300	390	480	600
480/240	600/300	900/445	1200/600	1560	1800/900	1200	1560	1920	2400
50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
334	334	334	334	334	334	-	-	-	-
506(Fig.2)	542(Fig.3)	638(Fig.4)	638(Fig.4)	638(Fig.4)	638(Fig.4)	-	-	-	-
264	264	264	264	324	324	-	-	-	-
256	334	334	334	334	334	334	334	334	480
442(Fig.1)	506(Fig.2)	506(Fig.2)	506(Fig.2)	-	542(Fig.3)	542(Fig.3)	638(Fig.4)	638(Fig.4)	680(Fig.5)
224	264	264	264	264	264	264	324	324	311

Indoor (Place without corrosive gas, dust, etc)

-10 ~ +50°C

Under 90% RH (no dew)

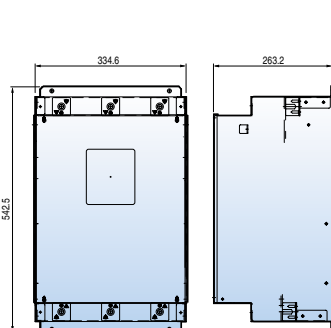
Square wave input by noise simulator Rphase, T phase $\pm 2000V$ 1 μs (between power terminals)

Natural cooling by heat sink and compulsory cooling using heat sink and fan

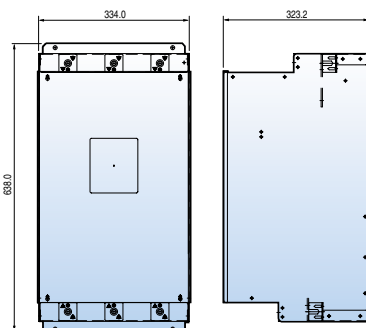
Thermostatic sensor operation, operation temperature 85°C \pm 5°C

Over 1000V, 5M Ω

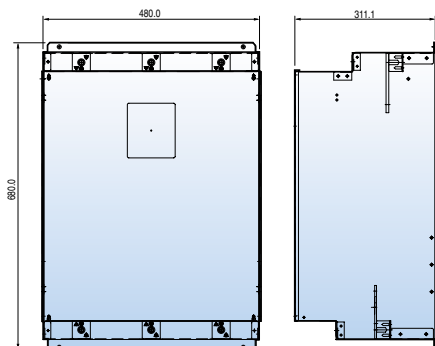
EN 61131-2, EN 50178



(Fig.3)



(Fig.4)



(Fig.5)