

FR-F/A740-G50

IP-54 Inverter Solution

The Power-Saving Inverters
for standard and High-End Applications



One-touch Digital Dial control and multi-language display for simple configuration and user-friendly operation



IP54 protection rating for standard and high-end applications from 0.4 to 400 kW



Up to 60 % energy savings lead to reduced operating cost via Optimum Excitation Control



Environmental friendly EMC filter included, satisfying the EMC directive (EN61800-3)

Standard applications

The FR-F740-G50 is the ideal solution to operate standard applications such as fans, compressors and pumps.

380-500V, EMC filter acc. EN61800-3(2004) Category C1 (20 m), Category C2 (100 m) Second Environment, Coating (minimum 3C2), Low Harmonic; incl. DC-choke and numeric display

Power Range	Overload	Rated current	Art. No.	Type	W x H x D (mm)	Weight (kg)
Wall mounting						
0.37 kW	ND min 110 % 60 sec.	2.3 A	267981	FR-F740-00023-EC-IP54-G50	260x710x300	21
0.55 kW	ND min 110 % 60 sec.	2.3 A	267981	FR-F740-00023-EC-IP54-G50	260x710x300	21
0.75 kW	ND min 110 % 60 sec.	2.3 A	267981	FR-F740-00023-EC-IP54-G50	260x710x300	21
1.1 kW	ND min 110 % 60 sec.	3.8 A	267982	FR-F740-00038-EC-IP54-G50	260x710x300	21
1.5 kW	ND min 110 % 60 sec.	3.8 A	267982	FR-F740-00038-EC-IP54-G50	260x710x300	21
2.2 kW	ND min 110 % 60 sec.	5.2 A	267983	FR-F740-00052-EC-IP54-G50	260x710x300	21
3.0 kW	ND min 110 % 60 sec.	8.3 A	267984	FR-F740-00083-EC-IP54-G50	260x710x300	22
4.0 kW	ND min 110 % 60 sec.	8.3 A	267984	FR-F740-00083-EC-IP54-G50	260x710x300	22
5.5 kW	ND min 110 % 60 sec.	12.6 A	267985	FR-F740-00126-EC-IP54-G50	260x710x300	22
7.5 kW	ND min 110 % 60 sec.	17.0 A	267986	FR-F740-00170-EC-IP54-G50	260x710x300	27
11 kW	ND min 110 % 60 sec.	25.0 A	267987	FR-F740-00250-EC-IP54-G50	260x710x300	27
15 kW	ND min 110 % 60 sec.	31.0 A	267988	FR-F740-00310-EC-IP54-G50	310x940x322	39
18.5 kW	ND min 110 % 60 sec.	38.0 A	267989	FR-F740-00380-EC-IP54-G50	310x940x322	40
22 kW	ND min 110 % 60 sec.	47.0 A	267990	FR-F740-00470-EC-IP54-G50	310x940x322	50
30 kW	ND min 110 % 60 sec.	62.0 A	267991	FR-F740-00620-EC-IP54-G50	310x940x322	54
37 kW	ND min 110 % 60 sec.	77.0 A	267992	FR-F740-00770-EC-IP54-G50	405x1120x322	79
45 kW	ND min 110 % 60 sec.	93.0 A	267993	FR-F740-00930-EC-IP54-G50	515x1250x448	116
55 kW	ND min 110 % 60 sec.	110.0 A	267994	FR-F740-01160-EC-IP54-G50	515x1250x448	122
75 kW	ND min 110 % 60 sec.	180.0 A	267995	FR-F740-01800-EC-IP54-G50	515x1250x448	130
90 kW	ND min 110 % 60 sec.	180.0 A	267995	FR-F740-01800-EC-IP54-G50	515x1250x448	130
110 kW	ND min 110 % 60 sec.	216.0 A	267996	FR-F740-02160-EC-IP54-G50	600x1600x480	165
132 kW	ND min 110 % 60 sec.	260.0 A	267997	FR-F740-02600-EC-IP54-G50	600x1600x480	175
Floor standing						
160 kW	ND min 110 % 60 sec.	325.0 A	267998	FR-F740-03250-EC-IP54-G50	600x1800x500	280
200 kW	ND min 110 % 60 sec.	432.0 A	267999	FR-F740-04320-EC-IP54-G50	600x2000x500	350
250 kW	ND min 110 % 60 sec.	481.0 A	268000	FR-F740-04810-EC-IP54-G50	600x2000x500	390
315 kW	ND min 110 % 60 sec.	610.0 A	268001	FR-F740-06100-EC-IP54-G50	1200x1800x500	580
355 kW	ND min 110 % 60 sec.	683.0 A	268002	FR-F740-06830-EC-IP54-G50	1200x1800x500	600
400 kW	ND min 110 % 60 sec.	770.0 A	268003	FR-F740-07700-EC-IP54-G50	1200x1800x600	640

The FR-F740-G50 (standard applications)

- Power range 0.4-400 kW
- EMC filter included to satisfy the EMC directive (EN61800-3 up to 100 m motor cable length)
- DC-Link choke integrated to be compliant with the IEC/EN 61000-3-12 low harmonic directive.
- Numerical display included

Integrated network

- RS 485
- Modbus RTU
- BacNet
- Mitsubishi protocol

High-end applications

The FR-A740-G50 is the ideal solution to operate high-end applications such as separators, decanters, conveyor belts and presses with high overload capability.

380-480V, EMC filter acc. EN61800-3(2004) Category C1 (20 m), Category C2 (100 m) Second Environment, Coating (minimum 3C2), Low Harmonic; incl. DC-choke and graphic display

Power Range	Overload	Rated current	Art. No.	Type	W x H x D (mm)	Weight (kg)
Wall mounting						
0.37 kW	HD min 150 % 60 sec.	2.5 A	267934	FR-A740-00038-EC-IP54-G50	260x710x300	21
0.55 kW	HD min 150 % 60 sec.	2.5 A	267934	FR-A740-00038-EC-IP54-G50	260x710x300	21
0.75 kW	HD min 150 % 60 sec.	2.5 A	267934	FR-A740-00038-EC-IP54-G50	260x710x300	21
1.1 kW	HD min 150 % 60 sec.	4.0 A	267935	FR-A740-00052-EC-IP54-G50	260x710x300	21
1.5 kW	HD min 150 % 60 sec.	4.0 A	267935	FR-A740-00052-EC-IP54-G50	260x710x300	21
2.2 kW	HD min 150 % 60 sec.	6.0 A	267936	FR-A740-00083-EC-IP54-G50	260x710x300	22
3.0 kW	HD min 150 % 60 sec.	9.0 A	267937	FR-A740-00126-EC-IP54-G50	260x710x300	22
4.0 kW	HD min 150 % 60 sec.	9.0 A	267937	FR-A740-00126-EC-IP54-G50	260x710x300	22
5.5 kW	HD min 150 % 60 sec.	12.0 A	267938	FR-A740-00170-EC-IP54-G50	260x710x300	27
7.5 kW	HD min 150 % 60 sec.	17.0 A	267939	FR-A740-00250-EC-IP54-G50	260x710x300	27
11 kW	HD min 150 % 60 sec.	23.0 A	267940	FR-A740-00310-EC-IP54-G50	310x940x322	39
15 kW	HD min 150 % 60 sec.	31.0 A	267941	FR-A740-00380-EC-IP54-G50	310x940x322	40
18.5 kW	HD min 150 % 60 sec.	38.0 A	267942	FR-A740-00470-EC-IP54-G50	310x940x322	50
22 kW	HD min 150 % 60 sec.	44.0 A	267943	FR-A740-00620-EC-IP54-G50	310x940x322	54
30 kW	HD min 150 % 60 sec.	57.0 A	267944	FR-A740-00770-EC-IP54-G50	405x1120x322	79
37 kW	HD min 150 % 60 sec.	71.0 A	267945	FR-A740-00930-EC-IP54-G50	515x1250x448	116
45 kW	HD min 150 % 60 sec.	86.0 A	267946	FR-A740-01160-EC-IP54-G50	515x1250x448	122
55 kW	HD min 150 % 60 sec.	110.0 A	267947	FR-A740-01800-EC-IP54-G50	515x1250x448	130
75 kW	HD min 150 % 60 sec.	144.0 A	267948	FR-A740-02160-EC-IP54-G50	600x1600x480	165
90 kW	HD min 150 % 60 sec.	180.0 A	267949	FR-A740-02600-EC-IP54-G50	600x1600x480	175
Floor standing						
110 kW	HD min 150 % 60 sec.	216.0 A	267950	FR-A740-03250-EC-IP54-G50	600x1800x500	280
132 kW	HD min 150 % 60 sec.	260.0 A	267951	FR-A740-03610-EC-IP54-G50	600x1800x500	280
160 kW	HD min 150 % 60 sec.	325.0 A	267952	FR-A740-04320-EC-IP54-G50	600x2000x500	350
200 kW	HD min 150 % 60 sec.	432.0 A	267953	FR-A740-05470-EC-IP54-G50	800x2000x500	550
250 kW	HD min 150 % 60 sec.	481.0 A	267954	FR-A740-06100-EC-IP54-G50	1200x1800x500	580
315 kW	HD min 150 % 60 sec.	610.0 A	267955	FR-A740-07700-EC-IP54-G50	1200x1800x600	640
355 kW	HD min 150 % 60 sec.	683.0 A	267956	FR-A740-08660-EC-IP54-G50	1200x1800x600	650
400 kW	HD min 150 % 60 sec.	770.0 A	267957	FR-A740-09620-EC-IP54-G50	1600x2000x600	880

The FR-A740-G50 (high-end applications)

- Power range 0.4-400 kW
- EMC filter included to satisfy the EMC directive (EN61800-3 up to 100 m motor cable length)
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- Graphical display included

Integrated network

- RS 485
- Modbus RTU
- BacNet
- Mitsubishi protocol

Operating conditions

Operating conditions		Specifications
Voltage		Three-phase, 380–500 V (-15 % / +10 %) (below 75 kW to 480 V)
Ambient temperature in operation		-10 °C to +40 °C
Storage temperature		-20 °C to +65 °C
Ambient humidity		Max. 90 % relative humidity (non-condensing)
Altitude		Max. 1,000 m above sea level
Protection rating		IP54
Shock resistance		10 G (for 00023 to 03610); 0.3 G (for ≤ 04320)
Vibration resistance		Max. 0.6 G
Certifications		CE/UL/CUL/GOST/DNV
Air flow direction	Wall mounting unit	Inlet: bottom; outlet: side
	Floor standing unit	Inlet: side; outlet: roof

Options

- Bypass
- Main switch
- Emergency switch
- Safety Stop (EN 954-1)
- Push buttons
- Signal lamps
- Sinewave filter

Network connections

- Profibus DP
- DeviceNet
- CANopen
- Ethernet/IP
- Profinet
- CC-Link
- LON Works
- SSCNet (optical fibre)
- Modbus TCP
- BacNet (Ethernet)
- Siemens FLN
- Metasys N2

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