



MATERIAL FACT SHEET

216912 FR-A741-45K

General Data

Product Hierarchy	IAK22602
	INVERTER
	FR-A741
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	A (Available from Stock)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000216912

FA-Inverter: Inverter

Series	FR-A SERIES
Type	FR-A741 INVERTER
Minimum Rated Voltage (V)	380
Min. Permissible Voltage (V)	323
Maximum Rated Voltage (V)	480
Max. Permissible Voltage (V)	528
Current Type	AC
Phases	3
Rated Output Current ND (A)	86
Rated Motor Capacity ND (kW)	45
Frequency Range (Hz)	0,2-400
Control Method	VECTOR CONTROL
Motor Type	INDUCTION MOTOR
Brake Chopper ED (%)	30
Integrated EMC Filter	YES
Safe Torque Off (STO)	NO
Regenerative (4Q)	YES
Integrated DC Choke	NO
Display	FR-DU07
Display Type	4 DIGITS LED
PLC Function	YES
Program Memory	1K
Program Memory Unit	STEPS
Integrated Digital Inputs	12
Digital Outputs (Transistor)	5
Digital Outputs (Relay)	2
Integrated Analogue Inputs	3
Integrated Analogue Outputs	2
IO Type of Terminal Block	SCREW
Expandable	YES
RS-485	2
USB	1
Built-In Network	MODBUS-RTU
Leakage Current (mA)	1
Power Loss ND (W)	2360
Standby Power Consumption (W)	-
Protection Class	IP00

Product Dimensions & Weight

Width (mm)	470
Height (mm)	700
Depth (mm)	368
Weight (kg)	83

Logistic Dimensions & Gross Weight

Length (cm)	61,0
Width (cm)	78,0

Height (cm)	49,5
Gross Weight (kg)	92,500
Volume (cdm)	235,521

Stock Data

Planned Delivery Time (Days)	240
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Life Cycle

Sales Start	29.09.2008
Predecessor	No Predecessor

Additional Product Information

Battery included	NO
Forecast Breakdown	FR-A741

Export Data

Commodity Code	85044095
Legal Control (Dual Use List)	Not Listed
Country of Origin	Japan (JP)
Preference Status (Supplier Declaration)	Non EU

Environmental

REACH Limit Exceeded	YES
REACH Substance CAS Number	117-81-7
REACH Substance CAS Number (2)	12626-81-2
REACH Substance CAS Number (3)	13560-89-9
REACH Substance CAS Number (4)	15571-58-1
REACH Substance CAS Number (5)	2451-62-9
REACH Substance CAS Number (6)	25155-23-1
REACH Substance CAS Number (7)	540-97-6
REACH Substance CAS Number (8)	541-02-6
REACH Substance CAS Number (9)	556-67-2
REACH Substance CAS Number (10)	7439-92-1
REACH Substance CAS Number (11)	872-50-4
Dangerous Goods Class	NO
Dangerous Goods Identifier	NO
RoHS Compliance	COMPLIANT
WEEE	B2B

Conformity

CE	COMPLIANT
UL/cUL	COMPLIANT
EAC	COMPLIANT
UKCA	COMPLIANT

Documentation & Media Data

Manual URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=bltdae25c2bd5f2ff94&q=FR-A741-45K&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=FR-A741-45K&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=FR-A741-45K&doc-lang=en
Network configuration file URL	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blte8cf990c7c524b4e&q=FR-A741-45K&doc-lang=en

Product Packaging

Cardboard (g)	9400
Other paper (g)	0
Aluminum (g)	0
Steel (g)	0
Styrofoam (g)	0
Other plastic (g)	50
Wood (g)	0
Glass (g)	0
Others (g)	0

Spare parts

Material	Description	Quantity	Unit
230169	FR-A741-5.5K-55K PCB CPU	1	PC
282178	FR-A741-37K-45K PCB MA	1	PC

Material	Description	Quantity	Unit
282180	FR-A741-30K-55K PCB POWER	1	PC
164633	FR-AF740-00470-03610 FAN	3	PC
282182	FR-A741-37K-45K IGBT CM200DY	6	PC
230169	FR-A741-5.5K-55K PCB CPU	1	PC
282178	FR-A741-37K-45K PCB MA	1	PC
282180	FR-A741-30K-55K PCB POWER	1	PC
164633	FR-AF740-00470-03610 FAN	3	PC
282182	FR-A741-37K-45K IGBT CM200DY	6	PC

Compatible products

Material	Description / Price List Text / Classification
70727	FR-A5 CBL 1 Cable for connecting Inverter and Programming panel; 1m Class 100100405: FA-Inverter: Cable
70728	FR-A5 CBL 2,5 Cable for connecting Inverter and Programming panel; 2,5m Class 100100405: FA-Inverter: Cable
70729	FR-A5 CBL 5 Cable for connecting Inverter and Programming panel; 5m Class 100100405: FA-Inverter: Cable
88426	SC-FR-PC CONNECTION CABLE PC>INVERTER Programming Cable RS 232>RS485/422; 5m Class 100100405: FA-Inverter: Cable
136577	QC30-USB PLC Q Series CPU Programming cable for USB interface, 3 m Class 100100214: FA-MOD PLC: Cable
156775	FR-A7AX 16-Bit-Digital-Input; BCD/Binary-Code; 24V DC; 5mA for FR-F/A700 Class 100100402: FA-Inverter: Internal Option
156776	FR-A7AY Digital-/Analog Output; Output load: 24V DC; 0,1A for FR-F/A700 Class 100100402: FA-Inverter: Internal Option
156777	FR-A7AR Relay output; 3 additional output relays for FR-A/F700 Class 100100402: FA-Inverter: Internal Option
156778	FR-A7NC CC-Link Interface for FR-A/F700 Class 100100402: FA-Inverter: Internal Option
157514	FR-DU07 Parameter Unit for inverter type FR-A700-NA Class 100100403: FA-Inverter: External Option
157515	FR-ADP Adaptor Module for Operator Panel FR-DU07 Class 100100403: FA-Inverter: External Option
158524	FR-A7NP ProfibusDP Interface for FR-A/F700 Class 100100402: FA-Inverter: Internal Option
158525	FR-A7ND DeviceNet Interface for FR-A/F700 Class 100100402: FA-Inverter: Internal Option
166133	FR-A7AP Encoder Feedback for FR-A700 Class 100100402: FA-Inverter: Internal Option
166134	FR-PU07 Programming panel with LCD-Display for all units of FR-700 series Class 100100403: FA-Inverter: External Option
167612	FR-RJ45-HUB10 Distribution Module for RJ45; 10 way Class 100100403: FA-Inverter: External Option
167613	FR-RJ45-HUB4 Distribution Module for RJ45; 4 way Class 100100403: FA-Inverter: External Option
167614	FR-RJ45-TR Terminal Resistor Plug RJ45 Class 100100403: FA-Inverter: External Option
191399	FR-A7PS Power Supply Terminal Block 12V Class 100100402: FA-Inverter: Internal Option

Material	Description / Price List Text / Classification
191402	FR-A7AL Master Slave AB Phase I/O Class 100100402: FA-Inverter: Internal Option
209743	FFR-SI-93A-SS1 Sinusfilter for 200/400V Inverters; max. 93A; FT=4-16kHz; (W*H*D) 300*345*215mm Class 100100404: FA-Inverter: Filter
209758	FFR-DT-93A-SS1 du/dt Filter for 400V Inverters; max. 93A; FT=2-16kHz; (W*H*D) 190*240*100mm Class 100100404: FA-Inverter: Filter
227843	FFR-RS-45k-127A-EF100 Radio Noise Filter for FR-A741-30k to 45k; C1 25m; C2 100m Class 100100404: FA-Inverter: Filter
255077	NF250-SV 3P 150A Circuit breaker 3pole. In = 150A; Icu = Ics = 36kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
255119	NF250-SGV 3P 140-200A Circuit breaker 3pole. Ir = 140 - 200A; Icu = Ics = 36kA at AC 440V Class 100100901: FA-MCCB: Moulded-Case Circuit Breaker
275503	FR Configurator-M+FR-Configurator2 FR-Configurator for 700 series; multi I + FR-Configurator2 for 800 series Class 100101203: FA-Software: Software Inverter
283759	A7NETH-2P Ethernet/IP, ProfiNet I/O, BacNet/IP, EtherCat, Modbus TCP&MC protocol A/F/E700 Class 100100402: FA-Inverter: Internal Option
283759	A7NETH-2P Ethernet/IP, ProfiNet I/O, BacNet/IP, EtherCat, Modbus TCP&MC protocol A/F/E700 Class 100100402: FA-Inverter: Internal Option
283759	A7NETH-2P Ethernet/IP, ProfiNet I/O, BacNet/IP, EtherCat, Modbus TCP&MC protocol A/F/E700 Class 100100402: FA-Inverter: Internal Option
283759	A7NETH-2P Ethernet/IP, ProfiNet I/O, BacNet/IP, EtherCat, Modbus TCP&MC protocol A/F/E700 Class 100100402: FA-Inverter: Internal Option
283759	A7NETH-2P Ethernet/IP, ProfiNet I/O, BacNet/IP, EtherCat, Modbus TCP&MC protocol A/F/E700 Class 100100402: FA-Inverter: Internal Option
289335	FR-A8NS SSCNet Interface for FR-A800 Class 100100402: FA-Inverter: Internal Option
298670	S-T65 AC100V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 100V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298671	S-T65 AC200V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 200V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298672	S-T65 AC24V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 24V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298673	S-T65 AC300V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 300V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298674	S-T65 AC400V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 400V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298675	S-T65 AC48V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 48V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
298676	S-T65 AC500V Magnetic contactor. 30kW; 2NO + 2NC; Us = AC 500V, 50Hz Class 100101001: FA-MC: Magnetic Contactor
591579	RHF-5P 45-400-50-20-C High efficient double-stage passive harmonic filter for THDi <5%;400V;50Hz;45kW Class 100100404: FA-Inverter: Filter
591600	RHF-8P 45-400-50-20-C High efficient double-stage passive harmonic filter for THDi <8%;400V;50Hz;45kW Class 100100404: FA-Inverter: Filter