



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
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Export Data

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
282180	FR-A741-30K-55K PCB POWER	1	PC
164633	FR-AF740-00470-03610 FAN	3	PC

Material	Description	Quantity	Unit
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
191402	FR-A7AL Master Slave AB Phase I/O Class 100100402: FA-Inverter: Internal Option

Material	Description / Price List Text / Classification
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
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