



MATERIAL FACT SHEET

312997 RH-1FRHR5515-D

General Data

Product Hierarchy	IAG25601
	ROBOT
	RH-1FRHR-D
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	B (Limited Availability from Stock)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000312997

FA-Robot: Robotssystem

Series	RH-FRHR SERIES
Type	SCARA
Payload (kg)	1
Max. Reach Radius (mm)	550
Z Axis Stroke (mm)	150
Environment specification	STANDARD
Controller Type	CR800-D
Cycle Time (s)	0,28
Speed (mm/s)	6000
Repeatability (mm)	0,012
Installation Method	CEILING
Protection Class	IP20
Power Supply 1 Phase (VAC)	200-230
Power Supply 3 Phase (VAC)	200-230
Power Consumption (VA)	2000
Operating Range J1 (deg)	340
Operating Range J2 (deg)	290
Operating Range J4 (deg)	720

Product Dimensions & Weight

Width (mm)	340
Height (mm)	488
Depth (mm)	840
Weight (kg)	49

Logistic Dimensions & Gross Weight

Length (cm)	162,0
Width (cm)	80,0
Height (cm)	126,0
Gross Weight (kg)	142,000
Volume (cdm)	1.632,960

Stock Data

Planned Delivery Time (Days)	134
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Life Cycle

Sales Start	01.07.2017
Predecessor	277708 / RH-1FHR5515-D1-S60

Additional Product Information

Binding Tariff Information	DEBIT-10890/21-1
BTI validity date	20.06.2024
Battery included	YES - CHECK SPARE PART LIST

Export Data

Commodity Code	84795000
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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	101-14-4
REACH Substance CAS Number (2)	117-81-7
REACH Substance CAS Number (3)	12060-00-3
REACH Substance CAS Number (4)	1303-86-2
REACH Substance CAS Number (5)	7439-92-1
REACH Substance CAS Number (6)	80-05-7
Dangerous Goods Class	9
Dangerous Goods Identifier	UN3091
RoHS Compliance	NOT IN SCOPE
WEEE	B2B

Conformity

CE	COMPLIANT
UKCA	COMPLIANT

Documentation & Media Data

Manual URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=bltdae25c2bd5f2ff94&q=RH-1FRHR5515-D&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=RH-1FRHR5515-D&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=RH-1FRHR5515-D&doc-lang=en

Product Packaging

Cardboard (g)	26926
Other paper (g)	120
Aluminum (g)	0
Steel (g)	70
Styrofoam (g)	0
Other plastic (g)	1301
Wood (g)	36900
Glass (g)	0
Others (g)	500

Spare parts

Material	Description	Quantity	Unit
294161	RH-1FHR MOTOR J1 (1500W)	1	PC
415508	RH-6FRH MOTOR J2	1	PC
262573	RH-3FRH MOTOR J3	1	PC
598317	RV-4F/7F MOTOR HG-KR053D-S920060	1	PC
415499	RH-1FRHR/12FRH55XX/70XX HD J1	1	PC
262575	RH-1FHR HARMONIC DRIVE J2	1	PC
262584	RH-1FHR BALL SCREW SPLINE C	1	PC
294164	RH-1FHR CROSS ROLLER BEARING J1	1	PC
262586	RH-1FHR CROSS ROLLER BEARING J2	1	PC
133738	RP-3/5AH BALL BEARING 6001ZZNR	2	PC
262550	RH-12/20FRH BALL BEARING 6815ZZ/A2	2	PC
262598	RH-1FHR TIMING PULLEY J3B	1	PC
262591	RH-1FHR TIMING PULLEY J4A	2	PC
249940	RH-1FHR TIMING PULLEY J4B	1	PC
249941	RH-1FHR TIMING PULLEY J4C	1	PC
262599	RH-1FHR TIMING PULLEY J4D	1	PC
415513	RH-3FRH/1FRHR TIMING BELT J3	1	PC
415514	RH-3FRH/1FRHR TIMING BELT J4A	1	PC
415515	RH-3FRH/1FRHR TIMING BELT J4B	1	PC
262841	RH-12/20FRH V-SEAL J1 VR120A	1	PC
262835	RH-1FHR V-SEAL J2	1	PC
262604	RH-6CRHK OILSEAL J2	1	PC
262607	RH-1FHR OILSEAL AD70857	1	PC
262662	RH-1FHR OILSEAL AD1001107	1	PC
415500	RH-FR PIN J1	2	PC
415501	RH-FR HD RING J1	1	PC
415502	RH-FR PIN J2	2	PC
415503	RH-FR HD RING J2	1	PC

Material	Description	Quantity	Unit
164954	RH-12/20FRH AIR JOINT UKBL6	2	PC
243687	RH-12/20FRH AIR JOINT UKBL8	2	PC
278338	RV-7FRLL/13FR(L)/20FR PLUG UP6	2	PC
243688	RH-12/20FRH PLUG UP8	2	PC
249984	RH-12/20FRH GROMMET C-30SG-22A-UL	1	PC
237583	RH-12/20FRH GREASE NIPPLE WA610 NYLON	1	PC
262555	RH-12/20FRH GREASE NIPPLE WB610 NYLON	1	PC
164980	RH-12/20FRH GREASE NIPPLE CAP	2	PC
276672	RH-2FH2515 Ferritic core2	2	PC
164975	RH-12/20FRH PARALLEL PIN H74x8	1	PC
276699	RH-2FH RUBBER MOUNT	1	PC
262558	RH-12/20FRH CONNECTOR IL-2S-S3L(N)	1	PC
262617	RH-1FHR COVER ARM NO2 U	1	PC
262621	RH-3FHC COVER ARM NO2 D	1	PC
262674	RH-12/20FRH COVER BATTERY	1	PC
278359	RV-8CRL STOPPER A	4	PC
276664	RH-1FHR RUBBER STOPPER Z	2	PC
415320	RV-FR INTERNAL PCB DQ392	1	PC
415321	RV-FR INTERNAL PCB DQ006	1	PC
415452	RV-FR BATTERY HOLDER	4	PC
278335	RV-7FRLL/13FR(L)/20FR CARD SPACER	2	PC
415504	RH-1FRHR INTERNAL HARNESS 1	1	PC
415505	RH-1FRHR INTERNAL HARNESS 2	1	PC
276679	RH-1FHR BRAKE CABLE ASSY	1	PC
220347	CR2D CR2Q FAN CABLE ASSY POWER	1	PC
237625	RH-1FHR RUBBER SHEET (124-168)	4	PC
415506	RH-1FRHR COLLAR J1	1	PC
317013	RH-3/6CH/CRH CABLE CLAMP AL6	1	PC
265268	RV-4/7/13/20FRL/M SEAL WASHER 4X7.2	19	PC
415507	RH-1FRHR WASHER J1	2	PC
220244	CR2D CR2Q FIN GUARD FG-06ULB	1	PC
262683	RH-12/20FRH COVER BASE R	2	PC
278372	RV-7FRLL/13FR(L)/20FR COVER CONBOX	1	PC
262833	RH-12/20FRH COVER ADD	1	PC
262627	RH-3FH/6FH COVER ARM NO2 B	1	PC
262834	RH-1FHR STOPPER J1	1	PC
250017	RH-3CH/6CH/6CRH FIXED CAUTION NAMEPLATE	2	PC
228844	CR3D/CR3Q BOLT 116-020	4	PC
276703	RH-2FH HEX SOCKET SCREW M5x8	1	PC
276704	RV-5AS WASHER J3	2	PC
237604	RH-12/20FRH COORDINATES DIRECTION MARK a	1	PC
237605	RH-12/20FRH COORDINATES DIRECTION MARK b	1	PC
237606	RH-12/20FRH EARTH NAMEPLATE	1	PC
410994	RH-12/20FH POWER CABLE 1F-05UCBL-41	1	PC
602876	CR800 PCB CPU DQ171D	1	PC
405788	CR800 PCB SERVO CPU DQ865B	1	PC
405789	CR800 PCB SYSTEM IO DQ331B	1	PC
405790	CR800 PCB OPTIONAL SLOT DQ332A	1	PC
405791	CR800 PCB CONVERTER DQ801A	1	PC
405800	CR800 PCB INVERTER DQ882B FOR RH-1FRHR	1	PC
405801	CR800 POWER SUPPLY UNTIL RV-7FR/RH20FR	1	PC
405802	CR800 POWER SUPPLY 1FRHR/7FRLL/13FR/20FR	1	PC
405804	CR800 NOISE FILTER FOR RV-7FR/13FR/20FR	1	PC
405805	CR800 FUSE 500SF-20UL	3	PC
405806	CR800 FUSE HOLDER	3	PC
220184	CR2D CR2Q OPTION COVER	2	PC
405807	CR800 OPTION CASE	1	PC
220273	CR800 TB CONNECTOR	1	PC
262774	NARC 750 FILTER DUST	1	PC
262774	NARC 750 FILTER DUST	1	PC
405808	CR800 CABLE BK0FA1078H01	1	PC
405809	CR800 CABLE BK0FA1078H02	1	PC
405810	CR800 CABLE BK0FA1078H03	1	PC
405811	CR800 CABLE BK0FA1078H04	2	PC
262786	NARC 750/751 LOCK EDGING SADDLE	1	PC
220314	CR2D CR2Q CABLE GUIDE WS-1NS	8	PC
220243	CR800 RUBBER MOUNT KG-010	7	PC
220304	CR800 SPACER MPS-08-0	1	PC
405812	CR800 CONNECTOR U794D030G51	1	PC
405813	CR800 CONNECTOR U794D030G52	1	PC

Material	Description	Quantity	Unit
237852	CR800 SEAL ATT. (ELECTRIFIC.) 114-406	1	PC
64687	FUSE 1,6A	1	PC
405814	CR800 ACIN CABLE BK0FA1006H53	1	PC
405815	CR800 ACIN CABLE BK0FA1006H03	1	PC
405817	CR800 FAN 1	1	PC
405818	CR800 FAN 2	1	PC
248692	MR-BAT6V1	4	PC
679004	RH-1FHR-D INVERTER PCB YZ882-A	1	PC

Compatible products

Material	Description / Price List Text / Classification
124658	2A-RZ371 Robot option I/O-Interface: 32 inputs /32 Outputs (decentral I/O's) Class 100100604: FA-Robot: Interface Card
214968	R32TB Robot Teaching Box; Narc controller (standard version) Class 100100602: FA-Robot: Teachingbox
218862	2D-TZ378 Robot option I/O-Interface: 32 inputs /32 Outputs (internal I/O's expansion) Class 100100604: FA-Robot: Interface Card
219063	2D-TZ576 Robot option CC-Link-Interface-card Class 100100604: FA-Robot: Interface Card
225756	R32TB-15 Teaching box R32TB with 7 lines display and 15m cable length Class 100100602: FA-Robot: Teachingbox
232808	2D-TZ368 Robot option E/A-Interface: 32 inputs /32 Outputs SINK (internal I/O's) Class 100100604: FA-Robot: Interface Card
250467	1F-GR60S-01 RH-FH Hand output cable Class 100100605: FA-Robot: Cable
250468	1F-HS304S-01 RH-3FH Internal Wiring/Piping set for hand Class 100100607: FA-Robot: Other Option
250470	1F-VD01E-01 RH-FH Pneumatic single valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250471	1F-VD02E-01 RH-FH Pneumatic double valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250472	1F-VD03E-01 RH-FH Pneumatic triple valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250473	1F-VD04E-01 RH-FH Pneumatic quadruple valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250474	1F-HC35C-01 RH-FH Hand input cable Class 100100605: FA-Robot: Cable
251104	1F-UT-BOX RH-3/6FH-3/6FRH External Wiring/Piping box Class 100100607: FA-Robot: Other Option
259885	2D-TZ535 Network Interface for CompactCom module Class 100100604: FA-Robot: Interface Card
269546	2D-TZ535-PN-SET Robot Network Interface Profinet IO Class 100100604: FA-Robot: Interface Card
269555	2D-TZ535-PN Network Interface for CompactCom Modul Profinet Class 100100604: FA-Robot: Interface Card
270236	1E-ST0408C-300 Robot Option Hand curl Tube with 4 x 4mm diameter Class 100100606: FA-Robot: Tube
271212	2F-YZ581 Encoder Distribution Unit for robot controller Class 100100604: FA-Robot: Interface Card

Material	Description / Price List Text / Classification
273774	1F-DH-01 RH-3/6FH J1 Stopper Class 100100607: FA-Robot: Other Option
277712	1F-VV01E-01 RH-1F(R)HR Vacuum Single valve Class 100100603: FA-Robot: Valve
277713	1F-VV02E-01 RH-1F(R)HR Vacuum Double valves Class 100100603: FA-Robot: Valve
277714	1F-JS-21 RH-1F(R)HR Bellow 150mm Z-Axis (white) Class 100100607: FA-Robot: Other Option
282409	2D-TZ535-EIP-SET Robot Network Interface EtherNet/IP Class 100100604: FA-Robot: Interface Card
313061	4F-SF002-01 Safety option unit MELFA SafePlus for CR800 Controller Class 100100604: FA-Robot: Interface Card
313062	CR800-MB Protection Box IP54 for CR800 Controller Class 100100607: FA-Robot: Other Option
313063	2F-DQ535 Network Interface for CompactCom module CC-Link IE Filed AB6709 Class 100100604: FA-Robot: Interface Card
313064	4F-FS002H-W200 Force Sensor Set 200N incl. Interface unit (2F-DQ561) for FR Series Class 100100607: FA-Robot: Other Option
313105	4F-FS002H-W1000 Force Sensor Set 1000N incl. Interface unit (2F-DQ561) for FR Series Class 100100607: FA-Robot: Other Option
313106	1F-10UCBL-41 Machine cable for CR800 controller, standard, 10m Class 100100605: FA-Robot: Cable
313107	1F-15UCBL-41 Machine cable for CR800 controller, standard, 15m Class 100100605: FA-Robot: Cable
313108	1F-10LUCBL-41 Machine cable for CR800 controller, high flexible, 10m Class 100100605: FA-Robot: Cable
313109	1F-15LUCBL-41 Machine cable for CR800 controller, high flexible, 15m Class 100100605: FA-Robot: Cable
324560	2F-DQ535-CCIEF-SET Network Interface SET CC-Link IE Field for CR800 Contr. Class 100100604: FA-Robot: Interface Card
324579	RT ToolBox3 Standard Robot programming and simulation Software, Windows 10/11; USB Class 100101206: FA-Software: Software Robot
324580	RT ToolBox3 Pro Robot programming and simulation Software incl. MELFA-Works, Windows 10/11 Class 100101206: FA-Software: Software Robot
325728	2F-DQ510 MELFA Smart Plus Card Pack A-Type Class 100100604: FA-Robot: Interface Card
325729	2F-DQ511 MELFA Smart Plus Card A-Type Class 100100604: FA-Robot: Interface Card
325730	1F-02UCBL-41 Machine cable for CR800 controller, standard, 2m Class 100100605: FA-Robot: Cable
327863	1F-20UCBL-41 Machine cable for CR800 controller, standard, 20m Class 100100605: FA-Robot: Cable
327864	1F-20LUCBL-41 Machine cable for CR800 controller, high flexible, 20m Class 100100605: FA-Robot: Cable
334232	RT ToolBox3 Standard UPGRADE Robot programming and simulation Software, Windows 10/11, Upgrade; USB Class 100101206: FA-Software: Software Robot

Material	Description / Price List Text / Classification
410994	RH-12/20FH POWER CABLE 1F-05UCBL-41 Machine cable for CR800 controller, standard, 5m Class 100100608: FA-Robot: Spare Part
603944	4F-SF003-05 Safety option unit MELFA SafePlus II Slim for CR800 Controller Class 100100604: FA-Robot: Interface Card
687249	R86TB Robot Teaching Box with 10,1" (Colour / Touch version) Class 100100602: FA-Robot: Teachingbox