



Open Field Network CC-Link

Type AJ65FBTA2-16T, AJ65FBTA2-16TE

CC-Link System Low Profile Waterproof Remote Output Module

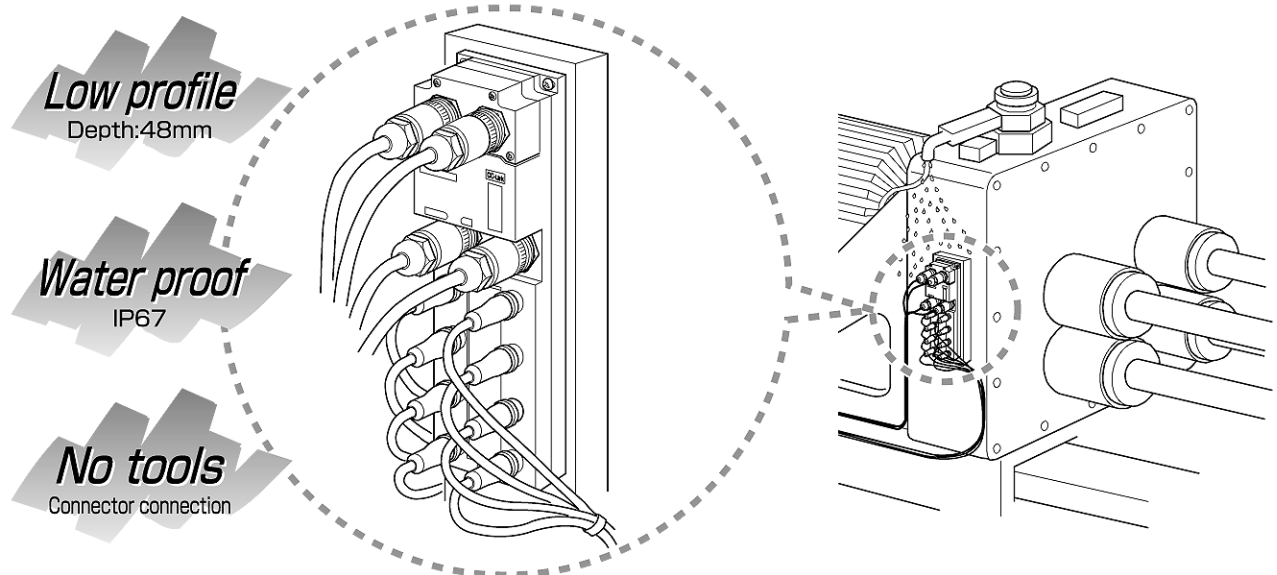
New!

2001 No.157E

NEW PRODUCT RELEASE

CC-Link

Two types of low profile waterproof remote Output modules are now available with the CC-Link System, following Input/Output modules!



NEW Output module

OUTPUT

AJ65FBTA2-16T
AJ65FBTA2-16TE

Input module

INPUT

AJ65FBTA4-16D
AJ65FBTA4-16DE

Combined module

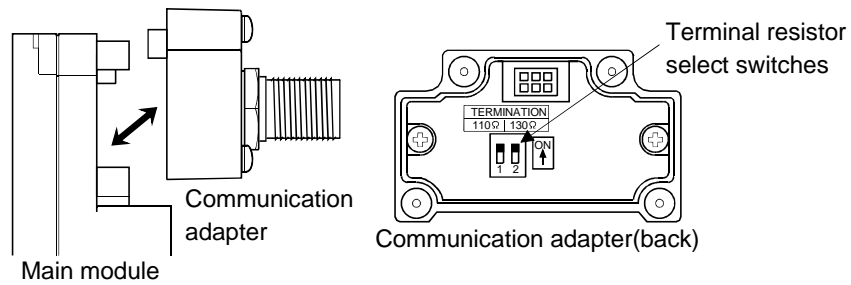
INPUT OUTPUT

AJ65FBTA42-16DT
AJ65FBTA42-16DTE

Please refer to NEW PRODUCT RELEASE No.145E for details of the input modules/the combined modules.

[Features]

- (1) Protection to IP67 rated water proof
 - The modules work at wet site safely with the protective structure that offers IP67 protection standard.
- (2) Simple connection without tools and saving man-hour
 - The connector connection reduces man-hour without tools.
- (3) Simple switch setting
 - The setting switches are placed on the module front.
- (4) No terminal resistors
 - The terminal resistor is no longer necessary because of the built-in terminal resistor setting switch (110Ω/130Ωswitching).



- (5) High ambient temperature-resistance
 - The modules work withstanding ambient temperature of 55°C (131°F).

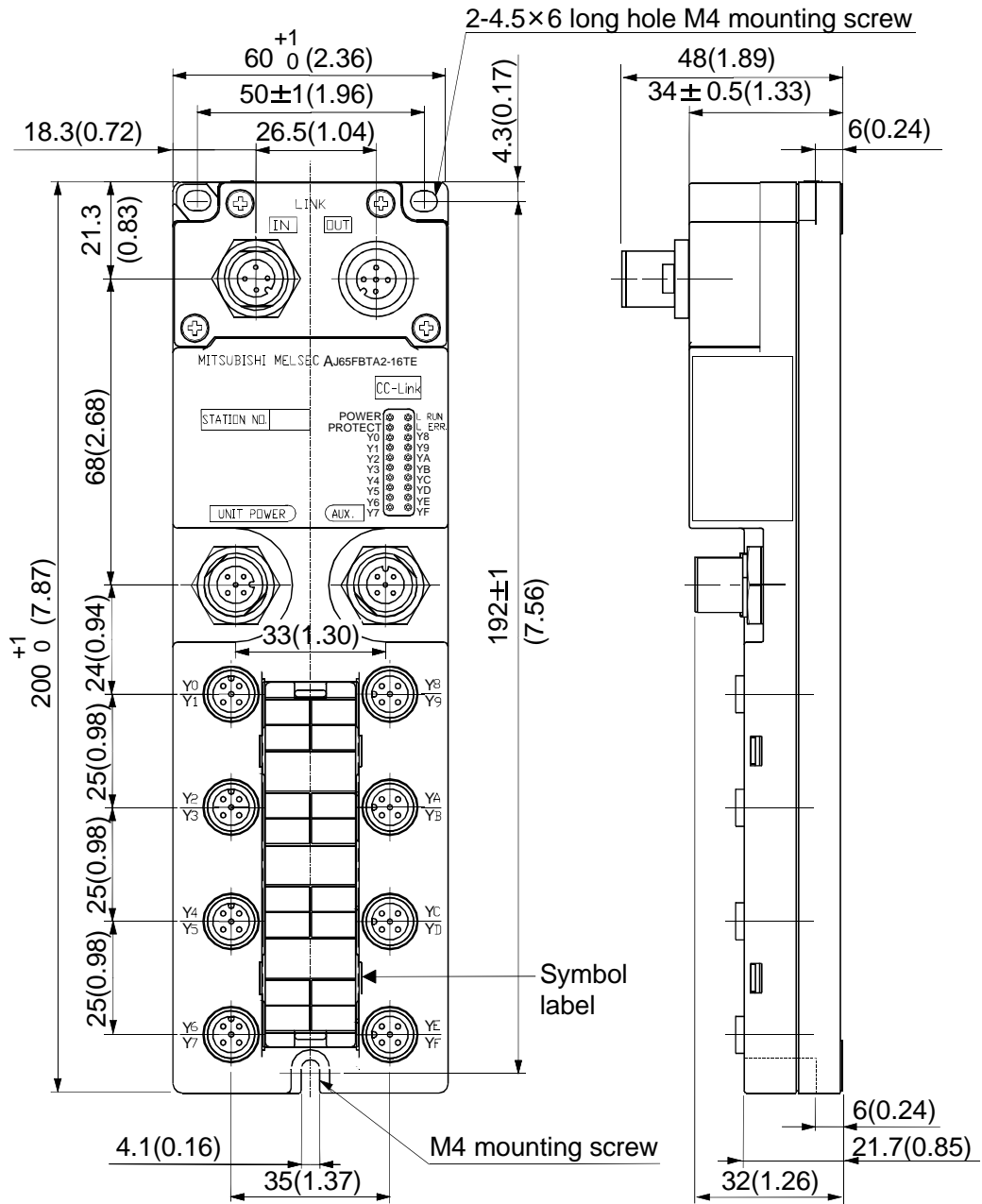
[Specification]

(1) AJ65FBTA2-16T, AJ65FBTA2-16TE Output module

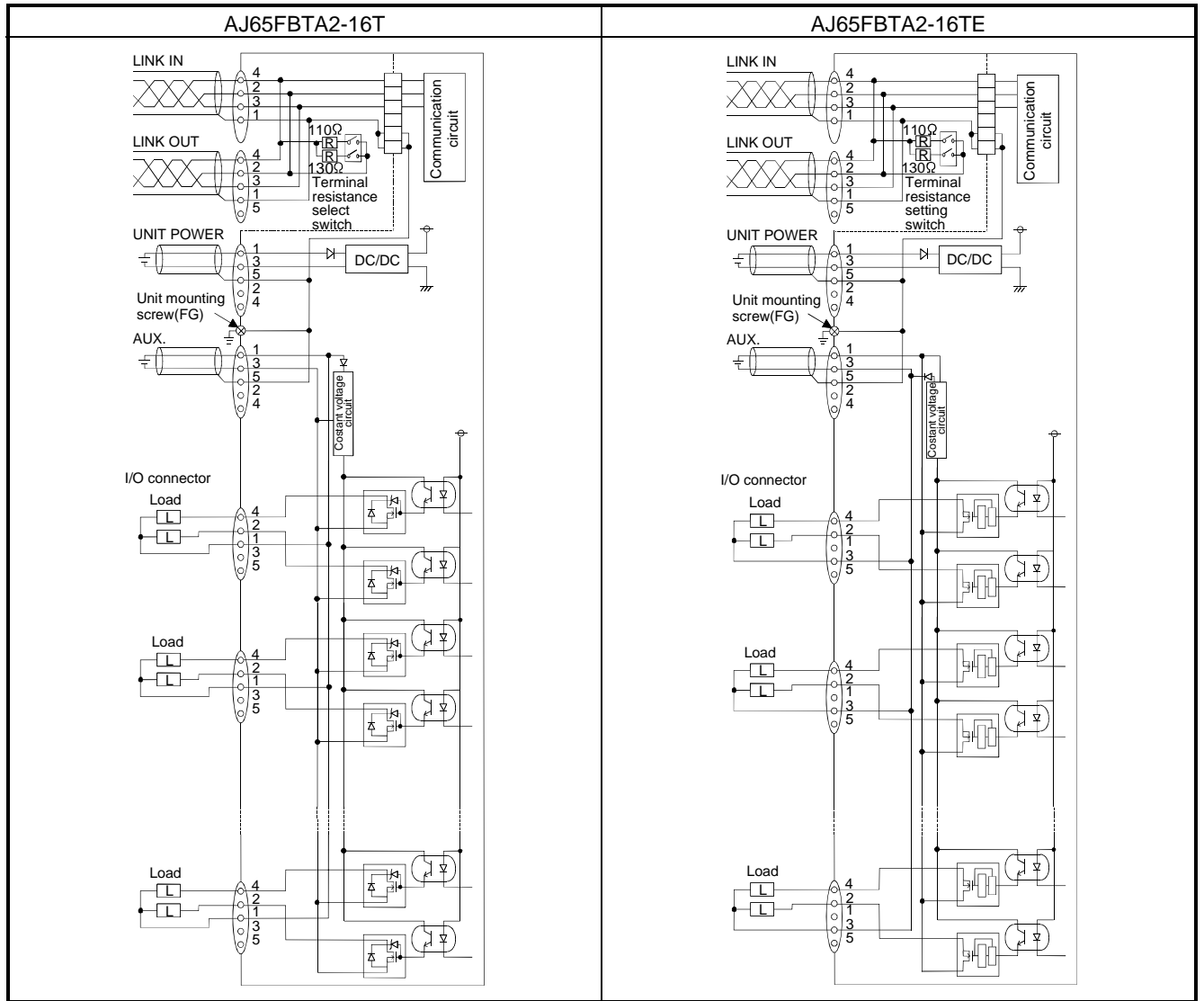
Form		AJ65FBTA2-16T	AJ65FBTA2-16TE
Specification			
Protection of degree		IP67	
Number of output points		16 points	
Isolation method		Photocoupler	
Rated load voltage		12/24VDC	
Operating load voltage range		10.2 to 26.4VDC (ripple ratio : within 5%)	
Max. load current		0.5A/point 4.0A/common	1.0A/point 4.0A/common
Max. load inrush current		1.0A 10ms or lower	2.0A 10ms or lower
Leakage current at OFF		0.25mA or lower	0.3mA or lower
Max. voltage drop at ON		0.15VDC or lower (TYP) 0.5A 0.25VDC or lower (MAX) 0.5A	0.15VDC or lower (TYP) 1.0A 0.2VDC or lower (MAX) 1.0A
Response time	OFF→ON	0.5ms or lower	
	ON→OFF	1.5ms or lower (resistance load)	
Output method		Sink type	Source type
Protection function		Provided: thermal protection, short circuit protections <ul style="list-style-type: none"> • Thermal protection operates in increments of 1 points. • Short circuit protection operates activated in increments of 1 points. • There is no LED display. • Automatic reset 	Provided: thermal protection, short circuit protection <ul style="list-style-type: none"> • Thermal protection operates in increments of 1 points. • Short circuit protection operates in increments of 1 points. • Lights up when the protection function is working.(During the protect operation, fuse blown is detected in the master unit side.) • Automatic reset
External Power supply for output	Voltage	10.2 to 28.8VDC (ripple ratio : within 5%)	
	Current	20mA or lower (When 24VDC is applied and all point is ON) Not including external load current	30mA or lower (When 24VDC is applied and all point is ON) Not including external load current
Surge suppressor		Zener diode	
Common wiring method		16 points/1 common (waterproof connector 2-wire type)	
Number of occupied stations		1 station 32 points assignment (use 16points)	
I/O module power supply	Voltage	20.4 to 26.4VDC (ripple ratio : within 5%)	
	Current	50mA or lower (When 24VDC is applied and all point is on)	
Noise durability		DC type noise withstand voltage 500Vp-p noise width 1μs, noise frequency 25 to 60Hz (noise simulator condition)	
Withstand voltage		500VAC for 1 minute between all DC external terminals and ground	
Insulation resistance		10 MΩ or higher, measured with a 500VDC insulation resistance tester	
Weight		0.40kg	
Option		Waterproof cap : A6CAP-WP2	
Other connected devices		See introductory list	

[External Dimensions Diagram]

(1) AJ65FBTA2-16T, AJ65FBTA2-16TE (The figure shows the AJ65FBTA2-16TE.)



[External wiring]



Communication connector			Pin arrangement		Communication connector							
Pin No.	LINK IN	LINK OUT			Pin No.	LINK IN	LINK OUT					
1	SLD	SLD			1	SLD	SLD					
2	DB	DB			2	DB	DB					
3	DG	DG			3	DG	DG					
4	DA	DA			4	DA	DA					
5	No pin	Vacant	5	No pin	Vacant							
Power supply connector					Power supply connector							
Pin No.	UNIT POWER	AUX.			Pin No.	UNIT POWER	AUX.					
1	+24V(UNIT)	+24V(I/O)			1	+24V(UNIT)	+24V(I/O)					
2	Vacant	Vacant			2	Vacant	Vacant					
3	24G(UNIT)	24G(I/O)			3	24G(UNIT)	24G(I/O)					
4	Vacant	Vacant			4	Vacant	Vacant					
5	FG	FG			5	FG	FG					
I/O connector					I/O connector							
Pin No.	Signal name	Pin No.	Signal name		Pin No.	Signal name	Pin No.	Signal name				
<u>Y0</u> <u>Y1</u>	1	+24V			<u>Y0</u> <u>Y1</u>	1	Vacant	<u>Y8</u> <u>Y9</u>	1	Vacant		
	2	Y1				2	Y1				2	Y9
	3	Vacant				3	24G				3	24G
	4	Y0				4	Y0				4	Y8
	5	Vacant				5	Vacant				5	Vacant
<u>Y2</u> <u>Y3</u>	1	+24V			<u>Y2</u> <u>Y3</u>	1	Vacant	<u>YA</u> <u>YB</u>	1	Vacant		
	2	Y3				2	Y3				2	YB
	3	Vacant				3	24G				3	24G
	4	Y2				4	Y2				4	YA
	5	Vacant				5	Vacant				5	Vacant
<u>Y4</u> <u>Y5</u>	1	+24V			<u>Y4</u> <u>Y5</u>	1	Vacant	<u>YC</u> <u>YD</u>	1	Vacant		
	2	Y5				2	Y5				2	YD
	3	Vacant				3	24G				3	24G
	4	Y4				4	Y4				4	YC
	5	Vacant				5	Vacant				5	Vacant
<u>Y6</u> <u>Y7</u>	1	+24V			<u>Y6</u> <u>Y7</u>	1	Vacant	<u>YE</u> <u>YF</u>	1	Vacant		
	2	Y7				2	Y7				2	YF
	3	Vacant				3	24G				3	24G
	4	Y6				4	Y6				4	YE
	5	Vacant				5	Vacant				5	Vacant
Front view												

[Introductory List]

(1) Communication Module-Waterproof Plug (Male / Female) 4-pin / 5-pin are applicable.

(a) For LINK IN Side (Female)

Model Name	Manufacturer	Specifications	Connection Cable Diameter
ELKA 4012 PG9	HIRSCHMANN	M12 - 4-pin Female Straight Type	φ6.0 to 8.0mm
ELKA 5012 PG9	HIRSCHMANN	M12 - 5-pin Female Straight Type	φ6.0 to 8.0mm
CM02A-8DP5S (03)	DDK Ltd.		φ8.0mm
ELWIKA 4012 PG9	HIRSCHMANN	M12 - 4-pin Female Right-angle Type	φ6.0 to 8.0mm
ELWIKA 5012 PG9	HIRSCHMANN	M12 - 5-pin Female Right-angle Type	φ6.0 to 8.0mm

(b) For LINK OUT Side (Male)

Model Name	Manufacturer	Specifications	Connection Cable Diameter
ELST 4012 PG9	HIRSCHMANN	M12-4-pin Male Straight Type	φ6.0 to 8.0mm
ELST 5012 PG9	HIRSCHMANN	M12-5-pin Male Straight Type	φ6.0 to 8.0mm
CM02A-8DJ5P (03)	DDK Ltd.		φ8.0mm
ELWIST 4012 PG9	HIRSCHMANN	M12-4-pin Male Right-angle Type	φ6.0 to 8.0mm
ELWIST 5012 PG9	HIRSCHMANN	M12-5-pin Male Right-angle Type	φ6.0 to 8.0mm

(2) Power Supply Module - Waterproof Plug (Female) Only 5-pin is applicable.

Model Name	Manufacturer	Specifications	Connection Cable Diameter
ELKA 5012 PG7	HIRSCHMANN	M12 - 5-pin Female Straight Type	φ4.0 to 6.0mm
ELKA 5012 PG9			φ6.0 to 8.0mm
CM02A-8DP5S (03)	DDK Ltd.		φ8.0mm
ELWIKA 5012 PG7	HIRSCHMANN	M12 - 5-pin Female Right-angle Type	φ4.0 to 6.0mm
ELWIKA 5012 PG9			φ6.0 to 8.0mm

(3) I/O Connector Y Branch Connector

Model Name	Manufacturer	Remarks
SAC-3P-M12Y Series	PHOENIX CONTACT	-
SAC-5P-M12Y Series		
YS2R Series	OMRON Corporation	-
VA-4YG-2	CORRENS Corporation	-

(4) CC-Link Cable

Model Name	Manufacturer	Remarks
FA-CBL Series	mitsubishi electric engineering Co.,Ltd	-
Cable with M12 Connector	Shinwa Co.,Ltd	Not compatible with the CA series.

[Manuals]

Manual name	Manual shipping form	IB/SH No.	Type code
Type AJ65FBTA2-16T CC-Link System Low Profile Waterproof Remote I/O Module Users Manual	Enclosed with product	IB-0800176	-
Type AJ65FBTA2-16TE CC-Link System Low Profile Waterproof Remote I/O Module Users Manual	Enclosed with product	IB-0800197	-
CC-Link System Compact Type Remote I/O Module User's Manual	Sold separately	SH-4007	13JL72

Country/Region	Sales office	Tel/Fax
U.S.A	Mitsubishi Electric Automation Inc. 500 Corporate Woods Parkway Vernon Hills, IL 60061	Tel : 1-847-478-2100 Fax : 1-847-478-0328
Brazil	MELCO-TEC Rep. Com.e Assessoria Tecnica Ltda. Av. Rio Branco, 123-15 ,and S/1507, Rio de Janeiro, RJ CEP 20040-005, Brazil	Tel : 55-21-221-8343 Fax : 55-21-221-9388
Germany	Mitsubishi Electric Europe B.V. German Branch Gothaer Strasse 8 D-40880 Ratingen, GERMANY	Tel : 49-2102-486-0 Fax : 49-2102-486-717
U.K	Mitsubishi Electric Europe B.V. UK Branch Travellers Lane, Hatfield, Herts., AL10 8XB,UK	Tel : 44-1707-276100 Fax : 44-1707-278695
Italy	Mitsubishi Electric Europe B.V. Italian Branch Centro Dir. Colleoni, Pal. Perseo - Ingr.2 Via Paracelso 12, 20041 Agrate B., Milano, Italy	Tel : 39-039-6053301 Fax : 39-039-6053312
Spain	Mitsubishi Electric Europe B.V. Spanish Branch Carretera de Rubi 76-80 08190 - Sant Cugat del Valles, Barcelona, Spain	Tel : 34-935-653135 Fax : 34-935-891579
South Africa	Circuit Breaker Industries LTD. Private Bag 2016, Isando 1600, Johannesburg, South Africa	Tel : 27-11-928-2000 Fax : 27-11-392-2354
Hong Kong	Ryoden International Ltd. 10th Floor, Manulife Tower, 169 Electric Road, North Point, HongKong	Tel : 852-2887-8870 Fax : 852-2887-7984
China	Ryoden International Shanghai Ltd. 3F Block5 Building Automation Instrumentation Plaza 103 Cao Bao Rd. Shanghai 200233 China	Tel : 86-21-6475-3228 Fax : 86-21-6484-6996
Taiwan	Setsuyo Enterprise Co., Ltd. 6F., No.105 Wu-Kung 3rd.RD, Wu-Ku Hsiang, Taipei Hsine, Taiwan R.O.C.	Tel : 886-2-2299-2499 Fax : 886-2-2299-2509
Korea	HAN NEUNG TECHNO CO.,LTD. 1F Dong Seo Game Channel Bldg., 660-11,Deungchon-dong Kangsec-ku, Seoul, Korea	Tel : 82-2-3668-6567 Fax : 82-2-3664-8335
Singapore	Mitsubishi Electric Asia Pte, Ltd. 307 ALEXANDRA ROAD #05-01/02, MITSUBISHI ELECTRIC BUILDING SINGAPORE 159943	Tel : 65-473-2480 Fax : 65-476-7439
Thailand	F. A. Tech Co.,Ltd. 898/28,29,30 S.V.CITY BUILDING,OFFICE TOWER 2,FLOOR 17-18 RAMA 3 ROAD,BANGKONGPANG,YANNAWA,BANGKOK 10120	Tel : 66-2-682-6522 Fax : 66-2-682-6020
Indonesia	P.T. Autoteknindo SUMBER MAKMUR JL. MUARA KARANG SELATAN BLOK A UTARA NO.1 KAV. NO.11 KAWASAN INDUSTRI/ PERGUDANGAN JAKARTA - UTARA 14440	Tel : 62-21-663-0833 Fax : 62-21-663-0832
India	Messung Systems Put,Ltd. Electronic Sadan NO:111 Unit No15, M.I.D.C BHOSARI,PUNE-411026	Tel : 91-20-7128927 Fax : 91-20-7128108
Australia	Mitsubishi Electric Australia Pty. Ltd. 348 Victoria Road, PostalBag, No 2, Rydalmere, N.S.W 2116, Australia	Tel : 61-2-9684-7777 Fax : 61-2-9684-7245

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