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Equipment Technical Submittal

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Version Control			
Document	Description	Issuer	Date
TS-10 Rev A	Comms Rooms DX Cooling systems	D Harrington	16/01/2023

## Technical Submission

**Document:** TS-10 Rev A

**Subject:** COMMS ROOMS DX COOLING SYSTEMS

<b>To:</b> David Simonson	<b>From:</b> D Harrington
<b>COMPANY:</b> Overbury EOS	<b>Date:</b> 16-Jan-23
<b>Products:</b> Comms Rooms DX Cooling systems	<b>To Reply:</b> <span style="background-color: black; color: black;">[REDACTED]</span>

<b>Distribution</b>	<b>Cc:</b>
	<b>Cc:</b>

<b>Products</b>	As Scheduled & Enclosed;
Comms room DX Cooling systems.	
Manufacturer - Mitsubishi	
Indoor unit model number -	
Outdoor Unit model number -	
Cooling capacity - As highlighted in yellow on attached Mitsubishi documentation.	
Please note:	
1. Technical details for DX Cooling systems on attached to be read in conjunction with L&P design schedule.	
2. L&P DX Cooling Systems Schedule M18 attached REV CO 1 dated 23/11/2023.	
3. Indoor Model specified PKA-RP60FAL is the old model reference and has now been replaced with PKA-M60KA with associated outdoor model reference PUZ-ZM60VHA. Power supply single phase.	
4. The specification calls for any system with a refrigerant charge exceeding 6kg to have leak detection. Each system has a factory charge of 2.8Kg therefore leak detection not proposed.	
5. BMS Integration	
5 wire adaptor - Run and fault monitoring possible from this option. Wiring to each indoor unit.	
AE 200 - Provides full monitoring & control however all outdoor units need to be linked together to allow communications to the AE200 network. This could be a problem logistically on site due to the locations of all the condensing units.	
<b>Please confirm required option.</b>	
6. All indoor units to have drip trays and water leak detection installed.	

<b>Documents:</b>	As Enclosed.
<b>Attached:</b>	None.

<b>Signed:</b>		<b>Engineer:</b> D Harrington
		<b>Dated:</b> 16/01/2023

<b>Comments</b>	

<b>Appended Documents:</b>	None.
<b>Attached:</b>	None.

# M18

## DX Cooling Systems Schedule



Project: UCL IOE Phase 2  
 Project No: 7110  
 Engineer: NB/HZ

Date: 23/11/2022  
 Revision: C01  
 Work Stage: Contract Issue

Ref	Location	ROOM UNITS				Type/Model	Unit Air Volume (L/s)	Power Supply/Electrical Supply	EXTERNAL UNIT				
		Cooling Duty Required Sensible (kW)	Cooling Duty Required Latent (kW)	Cooling Duty Required Total (kW)	Heating Duty Required Total (kW)				Condenser Ref	Condenser Model	Condenser Power (kW)	Condenser Electrical Supply	Indoor Unit Power Fed from Outdoor Unit (Yes/No)
<b>LEVEL 4</b>													
DIC006041	Block A Level 4 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006041	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006042	Block A Level 4 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006042	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006043	Block B Level 4 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006043	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006044	Block B Level 4 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006044	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
<b>LEVEL 5</b>													
DIC006045	Block A Level 5 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006045	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006046	Block A Level 5 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006046	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006047	Block B Level 5 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006047	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006048	Block B Level 5 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006048	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
<b>LEVEL 7</b>													
DIC006049	Block A Level 7 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006049	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006050	Block A Level 7 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006050	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006051	Block B Level 7 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006051	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006052	Block B Level 7 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006052	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
<b>LEVEL 8</b>													
DIC006053	Block A Level 8 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006053	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006054	Block A Level 8 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006054	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006055	Block B Level 8 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006055	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006056	Block B Level 8 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006056	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
<b>LEVEL 9</b>													
DIC006057	Block A Level 9 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006057	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
DIC006058	Block A Level 9 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006058	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes
<b>LEVEL 10 (Mechanical Room)</b>													
DIC006059	Open C Level 10 - Corridor Room (Junction)	0	0	0	0	PUL-RP050AL	200-333	Feed by Outdoor Unit Single phase	DIC006059	PUL-RP050AL	0.01	220-240V 50Hz SC 0.0.0.A - REC 7.0.1.A	Yes

Notes:  
 1. The DX cooling systems are to be provided with a factory fitted BACNET IP interface for full integration with the BMS System.  
 2. BMS to monitor status and fault.  
 3. BACNET Protocol Implementation Conformance Statements to be provided for each BACnet Device.  
 4. All devices to have passed BACnet Testing Laboratories (BTL) certification.  
 5. All BACnet devices to be installed in accordance with the BACnet standards with the exception of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.  
 6. Leak detector and drip trays to be provided to each condenser room.  
 7. Condensate from each unit to run to main building drainage via stainless steel.

# M18



## DX Cooling Systems Schedule

**Project:** UCL IOE Phase 2  
**Project No:** 7110  
**Engineer:** NB/HZ

**Date:** 23/11/2022  
**Revision:** 001  
**Work Stage:** Contract Issue

### Revision History

Revision	Date	Description	Initial
0	20.05.2020	Revised Stage 4 Issue	RM
1	30.06.2020	Final Stage 4 Issue	AA
00	06.05.2022	Contract Issue	AA
001	23.11.2022	Level 5 Core/Zone C added	HZ

## PKA-M R32

### Wall Mounted System

Power Inverter Heat Pump

Mr.SLIM™

The **PKA-M Power Inverter** range is a wall mounted system that blends a host of outstanding features with a sophisticated, streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is extremely flexible.

**R32**



#### Key Features & Benefits:

- Improved airflow control, including adjustable louvres for uniform air distribution
- Internal pipe connection to wall mounted unit for easy and neat installation
- CN22 connector as standard for connection to PAR-40MAA hard wired controller
- Full heating capacity down to -3°C
- 100m pipe run (Size 100)
- Replace Technology available



## Air Conditioning Product Information

## PKA-M R32 Wall Mounted System Power Inverter Heat Pump



PKA-M INDOOR UNITS	PKA-M35LA	PKA-M50LA	PKA-M60KA	PKA-M71KA	PKA-M100KA	PKA-M100KA	
CAPACITY (kW)	Heating (nominal)	4.1 (1.6-5.2)	5.0 (2.5-7.3)	7.0 (2.8-8.2)	8.0 (3.5-10.2)	11.2 (4.5-14.0)	11.2 (4.5-14.0)
	Cooling (nominal)	3.6 (1.6-4.5)	4.6 (2.3-6.6)	6.1 (2.7-6.7)	7.1 (3.3-8.1)	9.5 (4.9-11.4)	9.5 (4.9-11.4)
	Heating (UK)	3.5 (1.35-4.4)	4.25 (2.15-6.2)	5.95 (2.4-6.95)	6.8 (3.0-6.65)	9.5 (3.85-11.9)	9.5 (3.85-11.9)
	Cooling (UK)	3.3 (1.45-4.15)	4.23 (2.1-5.15)	5.5 (2.5-6.15)	6.55 (3.05-7.45)	9.2 (4.5-10.5)	9.2 (4.5-10.5)
SHF (nominal)	0.74	0.66	0.86	0.78	0.73	0.73	
COP / EER (nominal)	3.94 / 4.20	3.72 / 3.71	4.04 / 3.91	3.78 / 3.81	3.61 / 3.95	3.61 / 3.95	
SCOP (nsh) / SEER (nsc) (BS EN14825)	4.0 / 6.5	4.3 / 6.6	4.2 / 6.8	4.3 / 6.8	4.4 / 6.5	4.4 / 6.4	
ERP ENERGY EFFICIENCY CLASS	Heating/Cooling A+ / A++	A+ / A++	A+ / A++	A+ / A++	A+ / A++	A+ / A++	
AIRFLOW (l/s)	Lo-Mi2-M11-Hi	125-137-153-182	125-137-153-182	300-333-367	300-333-367	333-383-433	333-383-433
PIPE SIZE mm (in)	Gas	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
	Liquid	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
SOUND PRESSURE LEVEL (dBA)	Lo-Mi2-M11-Hi	34-37-40-43	34-37-40-43	39-42-45	39-42-45	41-45-49	41-45-49
SOUND POWER LEVEL (dBA)		60	60	64	64	65	65
DIMENSIONS (mm)	Width x Depth x Height	898 x 237 x 299	898 x 237 x 299	1170 x 295 x 365	1170 x 295 x 365	1170 x 295 x 365	1170 x 295 x 365
WEIGHT (kg)		12.6	12.6	21	21	21	21
ELECTRICAL SUPPLY		Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit	Fed by Outdoor Unit
FUSE RATING (BS88) - HRC (A)		6	6	6	6	6	6
INTERCONNECTING CABLE NO. CORES		4	4	4	4	4	4
WIRED REMOTE CONTROLLER REFERENCE		PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA	PAR-40MAA
WIRELESS REMOTE CONTROLLER REFERENCE		PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA	PAR-FL32MA

PUZ-ZM OUTDOOR UNITS	PUZ-ZM35VKA	PUZ-ZM50VKA	PUZ-ZM60VHA	PUZ-ZM71VHAR1	PUZ-ZM100VKAR1	PUZ-ZM100VKAR1 ③	
SOUND PRESSURE LEVEL (dBA)	Heating/Cooling	46 / 44	46 / 44	49 / 47	49 / 47	51 / 49	51 / 49
	Cooling	65	65	67	67	69	69
WEIGHT (kg)		46	46	70	70	116	123
DIMENSIONS (mm)	Width x Depth x Height	809 x 300 x 630	809 x 300 x 630	950 x 330 + 25 x 943	950 x 330 + 25 x 943	1050 x 330 + 40 x 1338	1050 x 330 + 40 x 1338
ELECTRICAL SUPPLY		220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	220-240v, 50Hz	380-415v, 50Hz
PHASE		Single	Single	Single	Single	Single	Three
SYSTEM POWER INPUT (kW)	Heating/Cooling (nominal)	1.040 / 0.869	1.347 / 1.239	1.732 / 1.560	2.116 / 1.863	3.102 / 2.405	3.102 / 2.405
	Heating/Cooling (UK)	0.81 / 0.84	1.12 / 1.12	1.25 / 1.65	1.54 / 1.92	2.47 / 2.06	2.47 / 2.06
STARTING CURRENT (A)		5.0	5.0	6.0	6.0	13.0	6.0
SYSTEM RUNNING CURRENT (A)	Heating/Cooling (MAX)	4.97 / 4.31 [13.4]	5.98 / 5.57 [13.4]	7.41 / 6.65 [19.4]	9.10 / 7.96 [19.4]	13.46 / 10.45 [27.1]	4.49 / 5.45 [8.6]
FUSE RATING (BS88) - HRC (A)		16	16	25	25	32	16
MAINS CABLE NO. CORES		3	3	3	3	3	5
MAX PIPE LENGTH (m)		50	50	55	55	100	100
MAX HEIGHT DIFFERENCE (m)		30	30	30	30	30	30
CHARGE REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t) - R32 (GWP 675) - 30m		2.0 / 1.35	2.00 / 1.35	2.80 / 1.89	2.80 / 1.89	4.00 / 2.70	4.00 / 2.70
MAX ADDITIONAL REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t) - R32 (GWP 675)		0.30 / 0.20	0.30 / 0.20	0.80 / 0.54	0.80 / 0.54	2.80 / 1.89	2.80 / 1.89

③ Three Phase

PKA-M35/50LA DIMENSIONS	PKA-M60/71/100KA DIMENSIONS
<p>UPPER VIEW</p> <p>FRONT VIEW</p> <p>SIDE VIEW</p>	<p>UPPER VIEW</p> <p>FRONT VIEW</p> <p>SIDE VIEW</p>



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Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP-2088), R32 (GWP-675), R407C (GWP-1774), R134a (GWP-1430), R513A (GWP-631), R454B (GWP-466), R1234ze (GWP-7) or R1234yf (GWP-4). These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP-1975), R32 (GWP-650), R407C (GWP-1630) or R134a (GWP-1300).

Effective as of May 2020



[greengateway.mitsubishielectric.co.uk](http://greengateway.mitsubishielectric.co.uk)

# PAR-41MAA

## Standard Wired Remote Controller

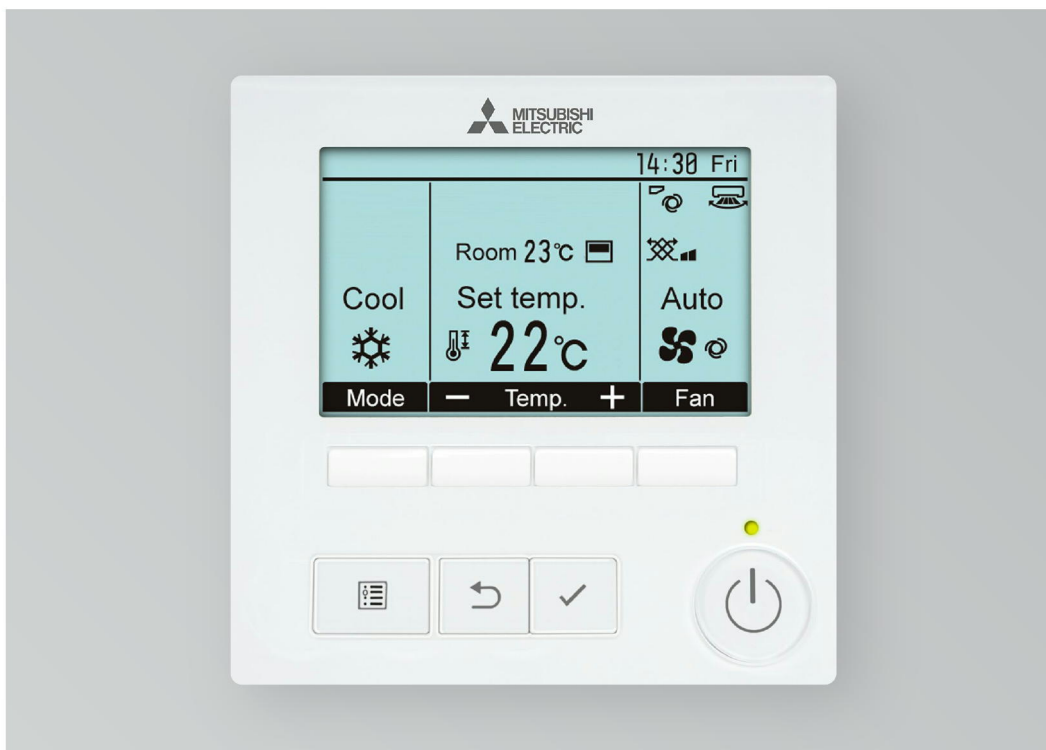
The **PAR-41MAA** standard wired remote controller is used to control Mr Slim and City Multi indoor units.

It is also compatible with M Series indoor units via MAC-397IF / MAC-334IF and is our most popular controller due to its user friendly backlit screen.

### Key Features & Benefits:

- Displays model name and serial number\*
- Night set back, scheduling, setpoint limitation
- 0.5°C Set Point adjustment
- Dual Set Point
- Run/Standby for Mr Slim
- Contact number under fault condition
- Backlight
- Daylight saving function
- Slimline Controller
- Selectable screen background (white or black setting)

\*Compatible only with suitable Mr Slim units.





**Controls** **Product Information**

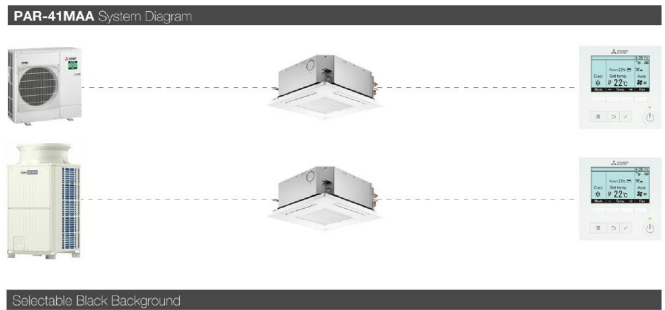
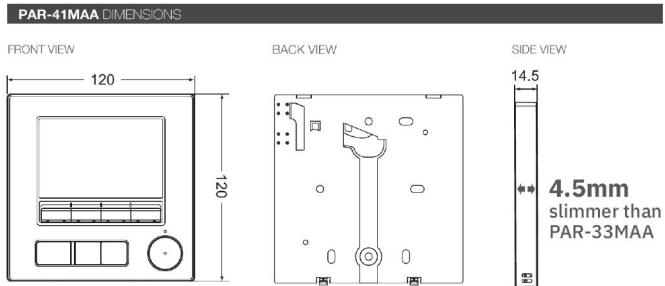
**PAR-41MAA**  
Standard Wired Remote Controller

Does this need updating?



REMOTE CONTROLLER	PAR-41MAA
Description	Standard Wired Remote Controller
Connect to	Indoor
Max Number of Units	16
Compatibility	Mr Slim, City Multi & M Series via MAC-397IF / MAC-334IF
Dimensions (mm) (WxDxH)	20 x 14.5 x 120
Control	On/Off ✓ Mode ✓ (0.5°C) Setpoint ✓ Fan Speed ✓ Air Direction ✓ Permit/Prohibit ✓ Filter Sign ✓
Monitor	On/Off ✓ Mode ✓ (0.5°C) Setpoint ✓ Fan Speed ✓ Air Direction ✓ Permit/Prohibit ✓ Filter Sign ✓ Fault Codes ✓ (0.5°C) Room Temperature ✓
Backlight	✓
Setpoint Limitation	✓
Independent Vane Control	✓
Contact Number under Fault Condition	✓
Scheduling	Weekly
Night Set Back	✓
Button Lock	✓
Easy Maintenance with Mr Slim	✓
Run / Standby with Mr Slim	✓
Silent Mode with Mr Slim	✓
Energy Saving with Mr Slim	✓
Occupancy Sensor (PIR)	x
3D Total Airflow <sup>1</sup>	✓
Model Name & Serial Number <sup>1</sup>	✓
Energy Consumption Monitoring <sup>1</sup>	✓
2+1 Backup Rotation <sup>1</sup>	✓
Smart Defrost <sup>1</sup>	✓
14°C Cooling <sup>1</sup>	✓

Notes: ✓ = Yes, x = No, - = Not applicable  
<sup>1</sup> Compatible only with suitable Mr Slim units.



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Mitsubishi Electric Living Environmental Systems UK

Mitsubishi Electric Cooling and Heating UK



Mitsubishi Electric Living Environmental Systems UK

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 Note: The fuse rating is for guidance only. Please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas. R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R1234ze (GWP:7) or R1234yf (GWP:4). \*These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1630) or R134a (GWP:1300).

Effective as of September 2021





Controls

## Product Information

**PAC-SJ95MA-E**  
Simple Interface

Making a  
World of  
Difference

CONTROLS



The **PAC-SJ95MA-E** is a simple adaptor for connection to Mr Slim outdoor units and allows connection to the M-NET centralised control network.

### Key Features

- Adaptor to connect Mr Slim units to M-NET



Cooling | Heating | Ventilation | Controls



# Controls

## Product Information

**PAC-SJ95MA-E**  
Simple Interface

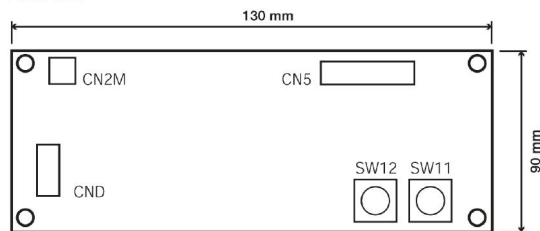
Making a  
World of  
Difference

SIMPLE INTERFACE	PAC-SJ95MA-E
Description	M-NET Converter
Connect to	Outdoor
Max Number of Units	1
Compatibility	Mr Slim Outdoor Units PUZ-ZM60-140 PUHZ-ZRP60-250 PUHZ-P100-250 PUHZ-SP100-140
Dimensions (mm) (WxDxH)	130 x 15 x 90
Connect Mr Slim to M-NET	✓

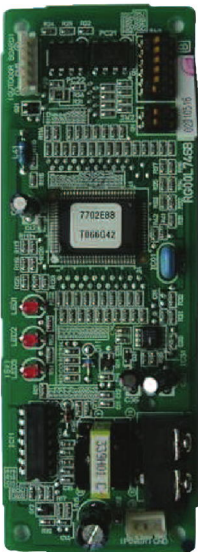
Note: ✓ = Yes

## DIMENSIONS

Front View



Side View



## SYSTEM DIAGRAM



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Note: The label rating is for guidance only. Please refer to the relevant datasheet for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2365), R32 (GWP:675), R407C (GWP:1776) or R134a (GWP:1430). These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. In case of Regulation (EU) No 606/2011 from IPCC 3rd edition, these are as follows, R410A (GWP:1975), R32 (GWP: 500), R407C (GWP:1600) or R134a (GWP:1300).



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Effective as of September 2017

Controls

## Product Information

**AE-200E**  
Centralised Controller

Making a  
World of  
Difference

CONTROLS



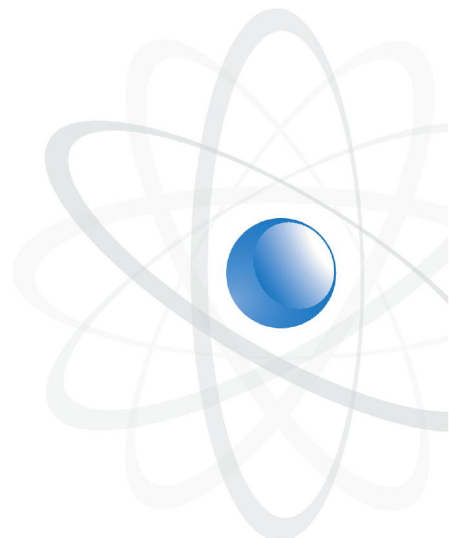
The **AE-200E** is a large 10.4" touch screen centralised controller with simple intuitive operation and control over M-NET network.

### Key Features

- 10.4" full function touch screen
- Centralised controller
- Monitor and control up to 50 indoor units (or up to 200 indoor units with EW-50Es)
- Monitor and control general equipment
- Energy monitoring, load shedding
- Web based controller
- Onboard HTML5 web browser
- Optional direct BACnet connection



Cooling | Heating | Ventilation | Controls



# Controls

## Product Information

### AE-200E Centralised Controller

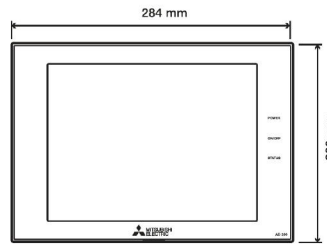
Making a  
World of  
Difference

CENTRALISED CONTROLLER	AE-200E
Description	10.4" Touch Screen Controller
Connect to	M-NET Network
Max Number of Units	50 and 4 Pulse Meters
Compatibility	M Series, Mr Slim, City Multi, Lossnay and Ecodan CAHV
Power Supply	220-240v, 50Hz
Dimensions (mm) (WxDxH)	283 x 64 x 199
Control	On/Off ✓ Mode ✓ Setpoint ✓ Fan Speed ✓ Air Direction ✓ Permit/Prohibit ✓ Filter Sign ✓
Monitor	On/Off ✓ Mode ✓ Setpoint ✓ Fan Speed ✓ Air Direction ✓ Permit/Prohibit ✓ Filter Sign ✓ Fault Codes ✓ Room Temperature ✓
Weekly Schedule	✓
Annual Schedule	✓
Night Set Back	✓
Web Pages	✓
Optimised Start	✓
Automatic Setpoint Adjustment	✓
Load Shedding	✓
Occupied / Unoccupied Settings Reset	x
Remote Monitoring with M2M	✓
Simple Energy Monitoring	✓
Advanced Energy Monitoring	✓

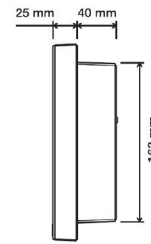
✓ = Yes, X = No, - = Not applicable.

## DIMENSIONS

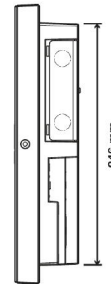
Front View



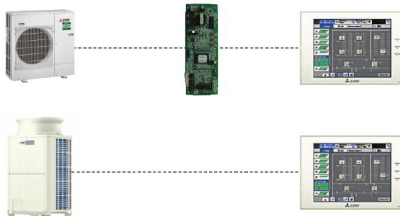
Side View



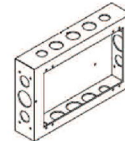
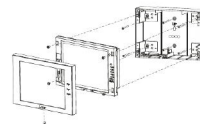
Upper View



## SYSTEM DIAGRAM



## OPTIONS



	PAC-YG82TB	PAC-YG84UTB
Description	AE-200E Plastic Wall Mounted Box	AE-200E Metal Wall Mounted Box
Compatibility	AE-200E	AE-200E
Dimensions (mm) (WxDxH)	282 x 77 x 198	380 x 90 x 280



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