

WALL HUNG SPLIT SYSTEM

1 Phase
1 Stage
3.50 kW



UNIT FEATURES

- Reverse Cycle Wall Hung Split System
- Mono & Multi Compatible Heads
- Rotary Compressor
- Superior Operating Range:
 - Cooling: up to 60°C DB
 - Heating: down to -25°C DB
- Adjustable Airflow
- 3D Multi-Directional Airflow
 - Up / Down Auto Swing
 - Left / Right Auto Swing
- Louvre Position Memory
- Fan Speed: Auto, Low, Medium and High
- Powder Coated Panels - Outdoor Unit
- Hydrophilic Indoor and Outdoor Coil Protection
- Self-Diagnosis and Auto Protection
- Fire Proof Electrical Box - Indoor and Outdoor Units
- Dehumidification Mode
- Super Ionizer Technology
- Intuitive Proximity Sensor
- R-32 low GWP Refrigerant

UNIT OPTION

- Left or Right Hand Drain Connection

CONTROL FEATURES

- Digital Display
- Auto Restart After Power Failure
- Timer ON/OFF Operation
- Remote ON/OFF Input
- Manual ON/OFF Operation
- 12-speed Indoor Fan
- 5-speed Outdoor Fan
- Sleep Mode
- Boost Mode
- Quiet Operation
- Dry Mode Operation
- Demand Response Ready
- 1W Standby Power Consumption
- Auto Defrost Function
- Follow Me Function
- Mute Operation
- Self Clean Function
- Fault Alarm Output

UNIT COMPLIANCE

- AS/NZS 3823.2 (MEPS)
- AS/NZS 4755.3.1 (DRM 1, 2 and 3)
- AS/NZS CISPR 14.1 (EMC)
- AS/NZS 60335.1 (ELECTRICAL APPLIANCE SAFETY)
- AS/NZS 60335.2.40 (ELECTRICAL APPLIANCE SAFETY - AIR CONDITIONERS)

SPECIFICATION SUMMARY

OUTDOOR UNIT MODEL	WRC-035CS	
INDOOR UNIT MODEL	WRE-035CS	
	NETT	
⁽¹⁾⁽²⁾ COOLING CAPACITY (kW) - NOMINAL (MIN - MAX)	3.50 (1.50 - 4.90)	
⁽¹⁾⁽³⁾ HEATING CAPACITY (kW) - NOMINAL (MIN - MAX)	3.70 (1.80 - 5.10)	
⁽¹⁾⁽⁴⁾ COOLING INPUT POWER (kW)	0.73	
⁽¹⁾⁽⁴⁾ HEATING INPUT POWER (kW)	0.77	
⁽¹⁾⁽²⁾ EER	4.79	
⁽¹⁾⁽³⁾ COP	4.81	
⁽⁵⁾ INDOOR AIRFLOW (l/s) - LOW/MED/HIGH/BOOST	100 / 120/180 / 250	
MOISTURE REMOVAL (l/hr)	1.7	
INDOOR SOUND PRESS. LEVEL dB(A) - SILENT/LOW/MED/HIGH	24 / 30 / 32 / 38	
OUTDOOR SOUND PRESS. LEVEL @ 1M dB(A)	52	
⁽⁶⁾ OUTDOOR SOUND POWER LEVEL dB(A)	58	
POWER SUPPLY	220 - 240V / 1Ph+N / 50 Hz	
INDOOR UNIT WIRING METHOD	Hard wire to Outdoor	
⁽¹⁾ RATED LOAD AMPS - COOLING / HEATING	3.2 / 3.4	
⁽⁷⁾ FULL LOAD AMPS	7.6	
⁽⁸⁾ CIRCUIT BREAKER AND CABLE AMPS	10.0	
WEIGHT (kg) - INDOOR / OUTDOOR	10.3 / 32.1	
OUTDOOR OPERATING RANGE (°C)	COOLING	-15 to 60
	HEATING	-25 to 30

⁽¹⁾ Measured and tested in accordance with AS/NZS 3823.1.1.
⁽²⁾ At 27°C DB / 19°C WB entering air temperatures and 35°C ambient.
⁽³⁾ At 20°C DB entering air temperature and 7°C DB / 6°C WB ambient.
⁽⁴⁾ input power includes indoor fan kW.
⁽⁵⁾ Max. - Min. airflow application range.
⁽⁶⁾ Determination of Sound Power Levels of Noise Sources per AS1217.2.
⁽⁷⁾ Full Load Amps are based on compressor and fan motors' maximum expected current.
⁽⁸⁾ See Specifications sheet for cable size and circuit breaker size details.

Note: Use input power to estimate running cost.



CAPACITY SELECTION DATA

WRC-035CS / WRE-035CS

COOLING PERFORMANCE

OUTDOOR TEMPERATURE (DB)	WB°C	INDOOR CONDITIONS (°C - DB)															
		17.0				18.0				19.0				22.0			
		24.0	25.0	27.0	29.0	24.0	25.0	27.0	29.0	24.0	25.0	27.0	29.0	24.0	25.0	27.0	29.0
18°C	Nett Capacity, kW	3.83	3.83	3.83	3.86	3.95	3.95	3.95	3.98	4.06	4.06	4.06	4.06	4.35	4.35	4.35	4.35
	Sensible Capacity, kW	2.80	2.99	3.37	3.79	2.57	2.76	3.16	3.54	2.32	2.52	2.93	3.29	1.70	1.92	2.31	2.70
	Power Input, kW	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
25°C	Nett Capacity, kW	3.60	3.60	3.63	3.66	3.69	3.69	3.69	3.72	3.81	3.81	3.81	3.81	4.09	4.09	4.09	4.09
	Sensible Capacity, kW	2.67	2.88	3.27	3.66	2.44	2.62	3.03	3.42	2.21	2.40	2.78	3.20	1.60	1.80	2.17	2.58
	Power Input, kW	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
30°C	Nett Capacity, kW	3.43	3.43	3.46	3.49	3.55	3.55	3.55	3.57	3.63	3.63	3.63	3.63	3.92	3.92	3.92	3.92
	Sensible Capacity, kW	2.61	2.78	3.22	3.49	2.38	2.55	2.94	3.36	2.14	2.32	2.72	3.09	1.53	1.73	2.12	2.51
	Power Input, kW	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.67	0.67	0.67	0.67
35°C	Nett Capacity, kW	3.26	3.26	3.29	3.32	3.37	3.37	3.37	3.40	3.46	3.46	3.50	3.51	3.75	3.75	3.75	3.75
	Sensible Capacity, kW	2.51	2.70	3.12	3.32	2.29	2.50	2.87	3.27	2.04	2.25	2.52	3.05	1.46	1.65	2.06	2.44
	Power Input, kW	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
40°C	Nett Capacity, kW	3.04	3.04	3.07	3.09	3.14	3.14	3.15	3.18	3.22	3.22	3.25	3.24	3.50	3.50	3.50	3.50
	Sensible Capacity, kW	2.43	2.64	3.03	3.09	2.20	2.42	2.80	3.18	1.97	2.16	2.57	2.94	1.36	1.57	1.96	3.15
	Power Input, kW	0.80	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
46°C	Nett Capacity, kW	2.82	2.82	2.85	2.88	2.90	2.90	2.93	2.96	2.99	2.99	2.99	3.17	3.25	3.25	3.25	3.25
	Sensible Capacity, kW	2.31	2.48	2.85	2.88	2.06	2.27	2.67	2.96	1.85	2.03	2.42	3.01	1.27	1.46	1.85	2.99
	Power Input, kW	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.91	0.91	0.91
60°C	Nett Capacity, kW	2.14	2.16	2.19	2.22	2.22	2.25	2.28	2.31	2.28	2.28	2.31	2.34	2.51	2.51	2.51	2.51
	Sensible Capacity, kW	1.99	2.16	2.19	2.22	1.78	1.98	2.28	2.31	1.55	1.73	2.12	2.34	0.98	1.18	1.55	2.43
	Power Input, kW	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21

HEATING PERFORMANCE

INDOOR CONDITIONS		OUTDOOR TEMPERATURE							
		-15°C D -16°C W	-7°C D -8°C W	-5°C D -6°C W	0°C D -1°C W	4°C D 3°C W	7°C D 6°C W	12°C D 11°C W	24°C D 18°C W
15°C - DB	Nett Capacity, kW	1.49	2.70	2.98	3.29	3.51	4.26	4.68	3.93
	Power Input, kW	0.43	0.70	0.62	0.76	0.85	0.85	0.93	0.78
18°C - DB	Nett Capacity, kW	1.42	2.58	2.85	3.15	3.35	4.07	4.47	3.75
	Power Input, kW	0.42	0.68	0.59	0.73	0.82	0.82	0.89	0.75
20°C - DB	Nett Capacity, kW	1.33	2.41	2.66	2.95	3.13	3.70	4.18	3.51
	Power Input, kW	0.39	0.64	0.57	0.69	0.78	0.77	0.85	0.71
22°C - DB	Nett Capacity, kW	1.29	2.34	2.58	2.86	3.04	3.69	4.06	3.40
	Power Input, kW	0.40	0.66	0.58	0.71	0.79	0.79	0.87	0.72
27°C - DB	Nett Capacity, kW	1.16	2.09	2.31	2.56	2.73	3.31	3.64	3.05
	Power Input, kW	0.40	0.66	0.58	0.71	0.79	0.79	0.87	0.73

PIPE LENGTH CORRECTION MULTIPLIER

* Indoor Unit Higher Than Outdoor Unit*	COOLING	PIPE LENGTH (m)					
		5	10	20	30		
H = Height Difference (m)	Indoor Unit Higher Than Outdoor Unit*	30	---	---	---	0.870	
		20	---	---	0.918	0.883	
		10	---	0.985	0.932	0.896	
		5	0.995	0.995	0.941	0.905	
		0	1.000	1.000	0.946	0.910	
	Indoor Unit Lower Than Outdoor Unit**	-5	1.000	1.000	0.946	0.910	
		-10	---	1.000	0.946	0.910	
		-20	---	---	0.946	0.910	
		-30	---	---	---	0.910	
** Indoor Unit Lower Than Outdoor Unit**	HEATING	PIPE LENGTH (m)					
		5	10	20	30		
H = Height Difference (m)	Indoor Unit Higher Than Outdoor Unit*	30	---	---	---	0.976	
		20	---	---	0.986	0.976	
		10	---	1.000	0.986	0.976	
		5	1.000	1.000	0.986	0.976	
		0	1.000	1.000	0.986	0.976	
	Indoor Unit Lower Than Outdoor Unit**	-5	0.992	0.992	0.978	0.968	
		-10	---	0.984	0.970	0.960	
		-20	---	---	0.962	0.953	
		-30	---	---	---	0.945	



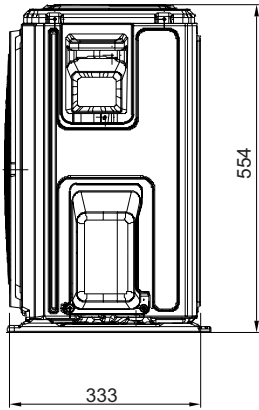
3.50 kW
1 Phase 1 Stage

UNIT DIMENSIONS

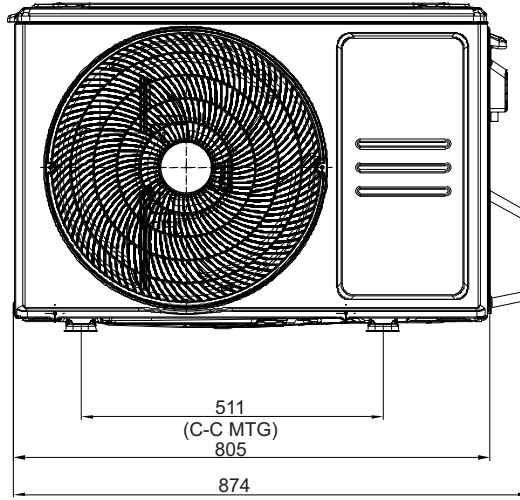
WRC-035CS / WRE-035CS

C OUTDOOR UNIT: WRC-035CS

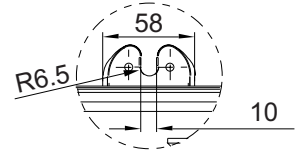
NOMINAL DIMENSION (H x W x D)
= 554 x 805 x 333



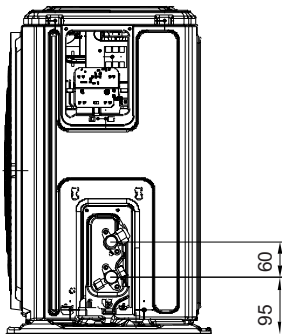
SIDE VIEW



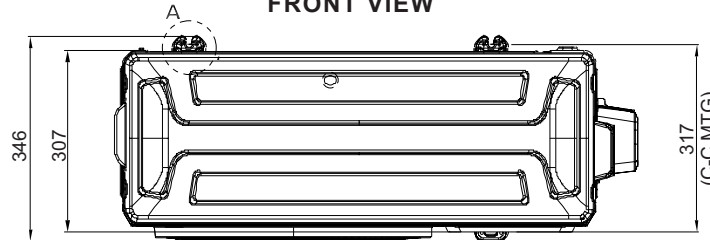
FRONT VIEW



DETAIL - A

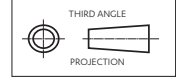


SIDE VIEW



TOP VIEW

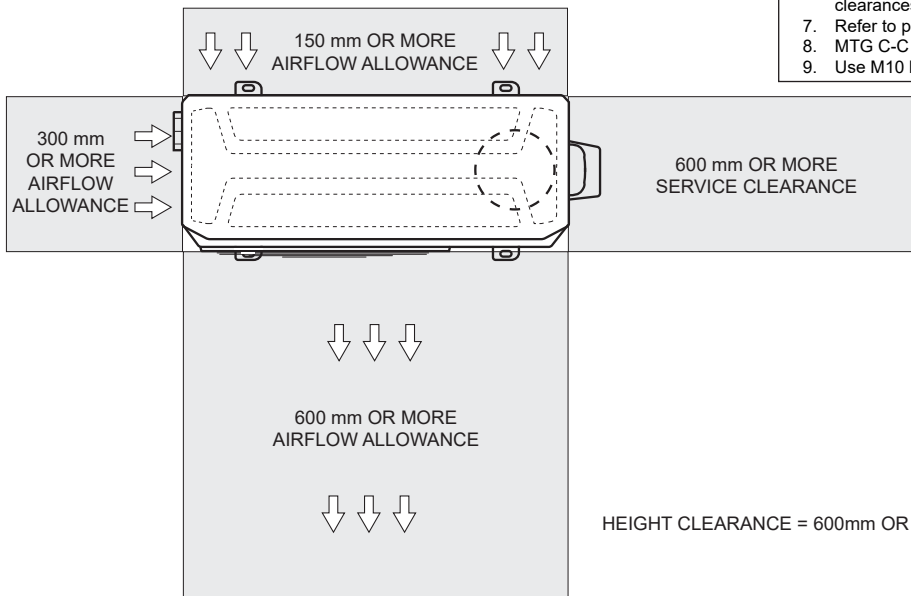
1 Phase
1 Stage
3.50 kW



NOTES:

1. Do not scale drawing. All dimensions are in mm unless specified. Refer to corresponding unit dimensional drawing for mounting hole details.
2. Service Access Areas and Spaces for Airflow Clearances given above are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
3. Minimum service access areas and spaces for airflow clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.
4. Under all circumstances, condenser air must not recirculate back onto condenser coil. Keep all clearance free of any obstructions.
5. Maximum External Static of Outdoor Fans is 5 Pa.
6. STACKING OF UNITS: Ensure that minimum airflow and clearances are met.
7. Refer to pipe Connection Details on Specifications Sheet.
8. MTG C-C DIST = Mounting Centre to Centre Distance.
9. Use M10 bolt for feet mounting.

SERVICE ACCESS AREAS & AIRFLOW ALLOWANCES



UNIT DIMENSIONS

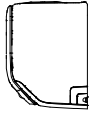
WRC-035CS / WRE-035CS

E INDOOR UNIT: WRE-035CS

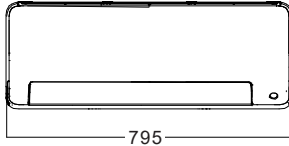
NOMINAL DIMENSION (H x W x D)
= 295 x 795 x 225



TOP VIEW



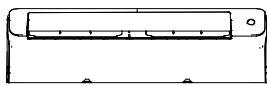
LHS VIEW



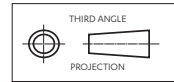
FRONT VIEW



RHS VIEW



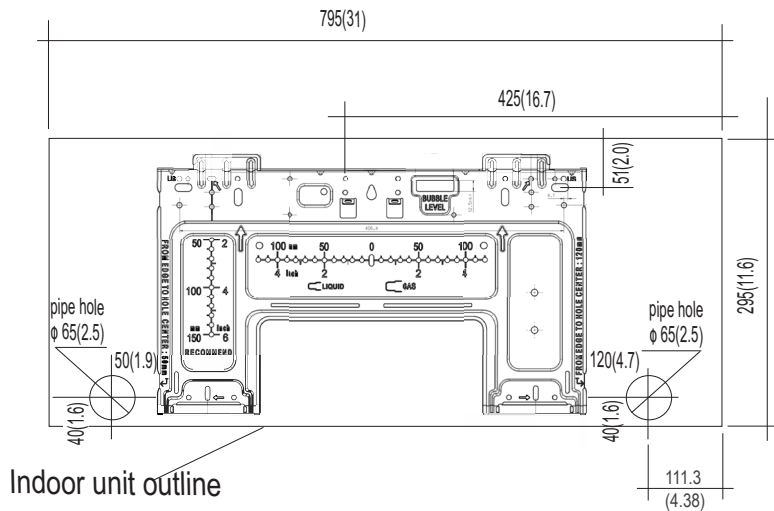
BOTTOM VIEW



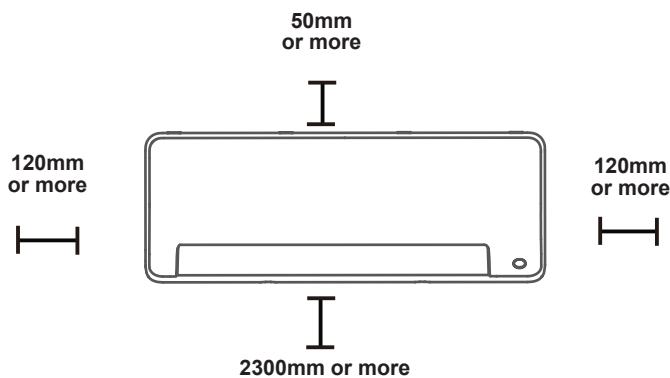
NOTES:

1. Do not scale drawing. All dimensions are in mm unless specified. Refer to corresponding unit dimensional drawing for mounting hole details.
2. Service Access Areas and Spaces for Airflow Clearances given are suggested minimum based on the condition that the spaces around the units are free from any obstructions and a walkway passage of 1000 mm between the units or between the unit and the outside perimeter is available.
3. Minimum Service Access Areas and Spaces for Airflow Clearances are responsibilities of the installer, ActronAir will not be held liable for any extra charges incurred due to lack of access and space for airflow.

MOUNTING DETAILS



MOUNTING CLEARANCES



3.50 kW
1 Phase 1 Stage

SPECIFICATIONS

WRC-035CS / WRE-035CS

1 Phase
1 Stage
3.50 kW

UNIT DIMENSIONS		
OUTDOOR DIMENSIONS	Depth	333 mm
	Height	554 mm
	Width	805 mm
INDOOR DIMENSIONS	Depth	225 mm
	Height	295 mm
	Width	795 mm

ELECTRICAL		
POWER SUPPLY	220 - 240 Volts / 1 Ph + N / 50Hz	
WIRING METHOD	Hard wire to outdoor	
FULL LOAD AMPS*	Total	7.6
FULL LOAD AMPS	Indoor	0.275
RATED LOAD AMPS**	Cooling	3.2
	Heating	3.4
IP RATING	Outdoor	IP24
	Indoor	IP20

IMPORTANT - The local electricity authority may require limits on starting current and voltage drop, please check prior to purchase.

*Full Load Amps are based on Compressor and Fan Motor's maximum expected current.

**Rated Load Amps are measured and tested in accordance with AS/NZS3823.1.1.

CABLE SIZE & CIRCUIT BREAKER SIZE	
Suggested minimum cable size should be used as a guide only, refer to AS/NZS 3000 "Australian/New Zealand Wiring Rules" for more details.	
Cable Size (Supply Mains)	1.0 mm ² (SUGGESTED MINIMUM)
Cable Size (Indoor to Outdoor Wire)	1.0 mm ² (3 Core + Earth)
Circuit Breaker Size	10.0Amps

OUTDOOR COIL	
TUBE TYPE	Copper Ø7mm, inner groove tube
FIN TYPE	Hydrophylic Aluminium
FACE AREA	0.43 m ²
FIN SPACING	1.3 mm
ROWS	2

OUTDOOR FAN	
NUMBER OF FANS x TYPE	1 x Axial
INPUT (W)	103
FAN SPEED (rpm) - Hi/Lo	770/560
AIRFLOW (l/s)	620

INDOOR COIL	
TUBE TYPE	Copper Ø7mm, inner groove tube
FIN TYPE	Hydrophylic Aluminium
FACE AREA	0.20 m ²
FIN SPACING	1.3 mm
ROWS	2

INDOOR FAN	
NUMBER OF FANS x TYPE	1 x Cross- flow fan
INPUT (W)	50
AIRFLOW - Boost/High/Med/Low/Quiet	250/180/120/100 (l/s)

AIR FILTERS	
Air filters are supplied standard and pre-fitted.	

COMPRESSOR	
NUMBER PER UNIT x TYPE	1 x Rotary Compressor
STARTING METHOD	DC Inverter Starter
INPUT (W)	765
REFRIGERANT OIL (TYPE / CHARGE)	ESTER OIL VG74 / 300ml
PROTECTION	External Thermal Cut-Out

REFRIGERATION SYSTEM	
REFRIGERANT TYPE	R-32
FACTORY CHARGE	900 g
PRE-CHARGE LENGTH	15 m
MINIMUM ROOM AREA (@ 2.3 INSTALLED HEIGHT)	No restriction
ADD'L. REFRIGERANT CHARGE	12 g / m
DESIGN PRESSURE (High/Low)	4.3/1.7 MPa

INTERCONNECTING PIPE RUN		
MAXIMUM PIPE LENGTH	25 m	
MAXIMUM CHARGE	1020 g	
MINIMUM ROOM AREA (@ 2.3 INSTALLED HEIGHT)	No restriction	
MINIMUM PIPE LENGTH	3 m	
MAX. VERTICAL LENGTH	10 m (Included in Max. Pipe Length)	
FIELD PIPE SIZES		
Liquid Pipe	6.35 mm (1/4")	
Gas Pipe	9.52 mm (3/8")	
PIPE CONNECTIONS		
Indoor	Liquid Pipe	6.35 mm (1/4")
	Gas Pipe	9.52 mm (3/8")
Outdoor	Liquid Pipe	6.35 mm (1/4")
	Gas Pipe	9.52 mm (3/8")
CONNECTION TYPE	Flare Nut	

ELECTRIC CONTROLS	
DEFROST METHOD	Reverse Cycle
WALL CONTROLLER CABLE (INCLUDED FOR WIRED CONTROLLER OPTION)	4 Core (0.75mm ²) Shielded Data Cable

OPERATING RANGE			
It is essential that the unit is correctly sized for the application and operates within its recommended range of operating conditions as shown below.			
MODE	RANGE	INDOOR OPERATING TEMPERATURE	OUTDOOR AIR INTAKE TEMPERATURE
COOLING	Max.	32°C DB	60°C DB
	Min.	17°C DB	-15°C DB
HEATING	Max.	30°C DB	30°C DB
	Min.	0°C DB	-25°C DB

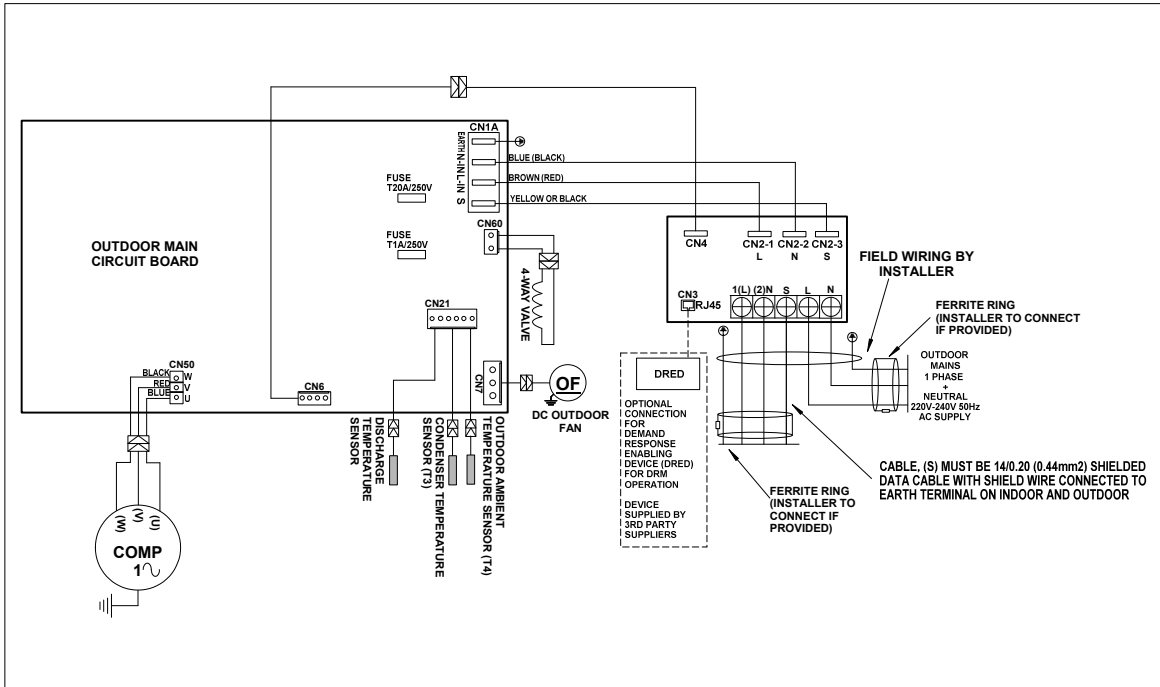


WIRING DIAGRAM

WRC-035CS / WRE-035CS

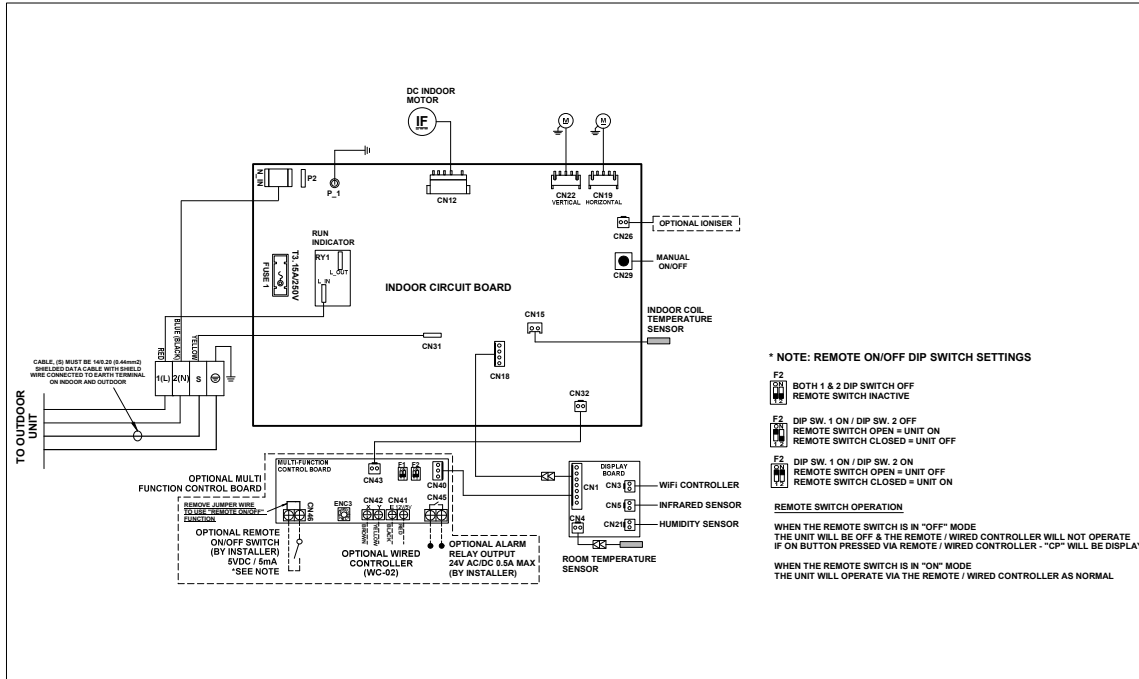
WRC-035CS (OUTDOOR)

3.50 kW
1 Phase 1 Stage



				ActronAir		Base Model No: WRC-026/035CS	Variation Code:	Variation: STANDARD		
						Description: OUTDOOR WIRING DIAGRAM - SERENE 2				
Rev.	Description	PCR	By	Date	This drawing remains the intellectual property of Actron Engineering Pty Ltd. Reproduction, modification and/or distribution are prohibited without written consent.	Drawn: RL	Date: 29-07-2020	Drawing No: WD3018	Revision A	Size: A4
A	ORIGINAL					Approved: JL	Date: 24-08-2020			

WRE-035CS (INDOOR)



*** NOTE: REMOTE ON/OFF DIP SWITCH SETTINGS**

F2 BOTH 1 & 2 DIP SWITCH OFF
REMOTE SWITCH INACTIVE

F2 DIP SW. 1 ON / DIP SW. 2 OFF
REMOTE SWITCH OPEN = UNIT ON
REMOTE SWITCH CLOSED = UNIT OFF

F2 DIP SW. 1 ON / DIP SW. 2 ON
REMOTE SWITCH OPEN = UNIT OFF
REMOTE SWITCH CLOSED = UNIT ON

REMOTE SWITCH OPERATION

WHEN THE REMOTE SWITCH IS IN "OFF" MODE
THE UNIT WILL BE OFF & THE REMOTE / WIRED CONTROLLER WILL NOT OPERATE
IF ON BUTTON PRESSED VIA REMOTE / WIRED CONTROLLER - "CP" WILL BE DISPLAY

WHEN THE REMOTE SWITCH IS IN "ON" MODE
THE UNIT WILL OPERATE VIA THE REMOTE / WIRED CONTROLLER AS NORMAL

				ActronAir		Base Model No: WRE-026/035/050/072/085CS	Variation Code:	Variation: STANDARD		
						Description: INDOOR WIRING DIAGRAM - SERENE 2				
B	RENAMED MULTI-FUNCTION BOARD, CONNECTOR CN32 TO CN43. CN29 CHANGE TO PUSH BUTTON	N/A	RL	30-10-2020	This drawing remains the intellectual property of Actron Engineering Pty Ltd. Reproduction, modification and/or distribution are prohibited without written consent.	Drawn: RL	Date: 28-07-2020	Drawing No: WD3017	Revision B	Size: A4
A	ORIGINAL					Approved: JL	Date: 30-10-2020			

