

| FACILITY PLANNING DATA | | | |
|---|---|--|--|
| ELECTRICAL INPUT | 1 PH, 100-120 VAC/200-240 VAC-50/60H | | |
| POWER CONNECTION TYPE | HARDWIRED | | |
| FULL LOAD AMPS(FLA) | 16.5-13.8/8.0-6.7 | | |
| MINIMUM CIRCUIT AMPACITY (MCA) | 20.3/9.3 | | |
| MAXIMUM OVERCURRENT PROTECTION (MOP) | 25/15 | | |
| FEATURES/ | OPTIONS | | |
| FAN TYPE | ELECTRICALLY COMMUTATED | | |
| MAXIMUM AIRFLOW -I/s(CFM) | 5437 m ³ /h (3200 CFM) | | |
| FAN CONTROL | VARIABLE SPEED | | |
| NUMBER OF FANS | 8 | | |
| HOT SWAPPABLE FANS | YES | | |
| HOT AISLE /RACK AISLE CONTAINMENT COMPATIBLE | YES | | |
| REFRIGERANT TYPE | R410A | | |
| NETWORK MANAGEMENT CARD | INCLUDED | | |
| STANDARD FILTER TYPE | 0.5-in. WASHABLE | | |
| STANDARD FILTER EFFICIENCY | MERV 1 | | |
| OPTIONAL FILTER TYPE | 2-in. PLEATED | | |
| OPTIONAL FILTER EFFICIENCY | MERV 8 | | |
| DRAINAGE SYSTEM | GRAVITY DRAIN/ CONDENSATE PUMP | | |
| NUMBER OF RACK INLET TEMP SENSORS | 1 | | |
| PIPING CONNECTIONS | TOP OR BOTTOM | | |
| ELECTRICAL CONNECTIONS | TOP OR BOTTOM | | |
| CABLE TYPE WATER DETECTOR | OPTIONAL | | |
| ELECTRICAL REHEAT | NO | | |
| HUMIDIFICATION | NO | | |

LIMIT WORKING CONDITIONS:

- REFRIGERANT TYPE: R410A
- VOLTAGE INPUT TOLERANCE: ±10%
 - APPROXIMATE MINIMUM RECOMMENDED LOAD: 8kW (27297 BTU/hr)
- OUTDOOR AMBIENT TEMPERATURE WITHOUT THE LOW AMBIENT TEMPERATURE KIT INSTALLED:
 - DOWN TO -15°C(+5°F) UP TO 48°(118°F).
- OUTDOOR AMBIENT TEMPERATURE WITH THE LOW AMBIENT TEMPERATURE KIT INSTALLED:
 - DOWN TO -40°C(-40°F) UP TO 48°(118°F).
- AMBIENT %RH : 5 TO 80%RH
- ALTITUDE: 3000 METERS (9843 FEET)

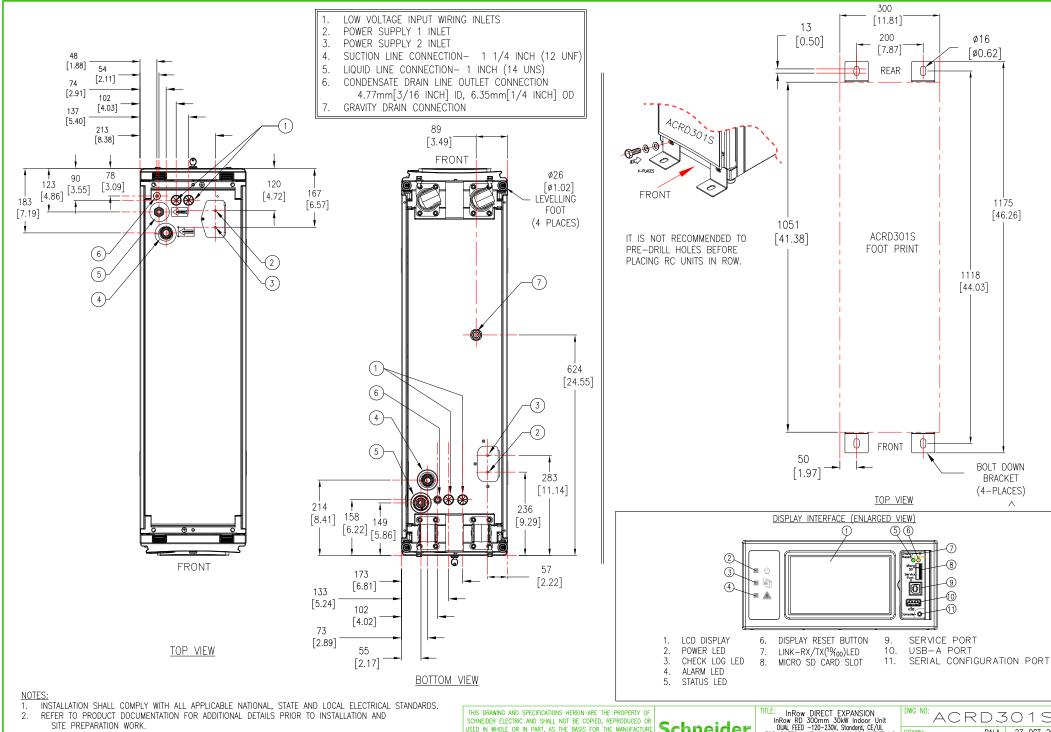
- INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL STANDARDS.
- REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
- 3. ALL DIMENSIONS ARE IN MILLIMETERS [INCHES]
- WHEN UNIT IS INSIDE THE ROW 900[36] REQUIRED FOR SERVICE ACCESS, WHEN OUTSIDE THE ROW 1200[48] REQUIRED FOR UNIT MOVEMENT. CHECK THE LOCAL AND NATIONAL CODES AND REGULATIONS FOR FURTHER SERVICE ACCESS REQUIREMENTS.
- SUCTION PIPE SHOWN WITHOUT INSULATION IN THIS SHEET.
- AVAILABLE PIPING CONFIGURATIONS: TOP OR BOTTOM
- NET WEIGHT OF UNIT IS 160 kg [352.7 lb].
- THIS INFORMATION PROVIDES APPROXIMATE CENTER OF GRAVITY CALCULATION.

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E: InRow DIRECT EXPANSION InRow RD 300mm 30kW Indoor Unit DUAL FEED -120-230V, Standard, CE/UL GENERAL ARRANGEMENT

ACRD301S 23-0CT-20 FIRS DRAWN: ENGINEER: 23-0CT-20 ANGLE RAAM C/K CHENG PROJECT: SUBMITTAL DRAWINGS SHEET 1 OF 6 APPROVED: RAAM C/K CHENG 23-OCT-20 PROJECTION



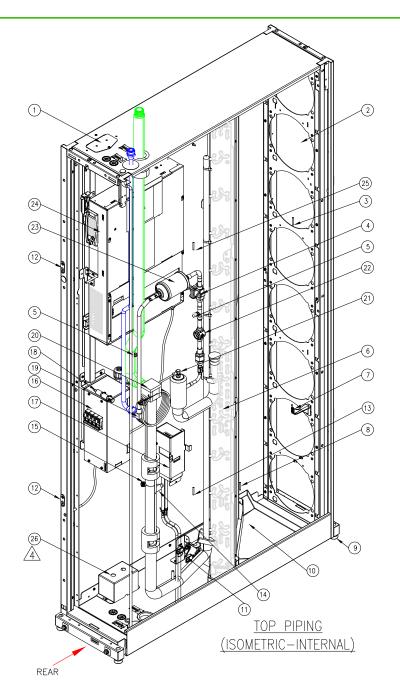
3. ALL DIMENSIONS ARE IN MILLIMETERS [INCHES]. △4. BOLT-DOWN KIT (SKU#AR7701) IS OPTIONAL AND HAS TO BE ORDERED SEPARATELY.

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Schneider 2 Electric TOP-BOTTOM VIEWS AND ANCHORING DETAILS

ACRD301S 27-0CT-20 FIRST DRAWN: ENGINEER: 27-0CT-20 ANGLE RAAM C/K CHENG PROJECT: SUBMITTAL DRAWINGS SHEET 2 OF 6 APPROVED: RAAM C/K CHENG 27-OCT-20 PROJECTION

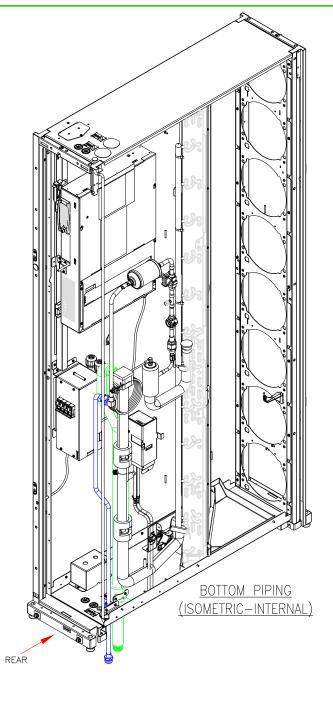
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- POWER SUPPLY CONNECTIONS (TOP)
- FAN LOCATION (TYPICAL)
- UPPER SUPPLY AIR TEMPERATURE SENSOR 3.
- 4. SOLENOID VALVE
- LIQUID LINE SERVICE PORT
- COOLING COIL
- LOWER SUPPLY AIR TEMPERATURE
- REFRIGERANT TEMPERATURE SENSOR
- LEVELING FEET
- CONDENSATE DRAIN PAN
- 11. DRAIN PAN FLOAT SWITCH
- 12. JOINING BRACKET
- 13. LOWER RETURN AIR TEMPERATURE SENSOR
- 14. TEMPERATURE SENSOR (SUCTION)
- 15. GAS LINE SERVICE PORT
- 16. AUTOMATIC TRANSFER SWITCH (ATS)
- 17. CONDENSATE DRAIN PUMP
- 18. TEMPERATURE AND HUMIDITY SENSOR(OPTIONAL)
- 19. INLET CONNECTION
- 20. OUTLET CONNECTION
- 21. ELECTRONIC EXPANSION VALVE (EEV)
- 22. SIGHT GLASS
- 23. FILTER DRIER
- 24. ELECTRICAL BOX
- 25. UPPER RETURN AIR TEMPERATURE SENSOR
- 26. CONDUIT BOX LOCATION (BOTTOM ENTRY)



SUCTION LINE (WITH INSULATION) LIQUID LINE



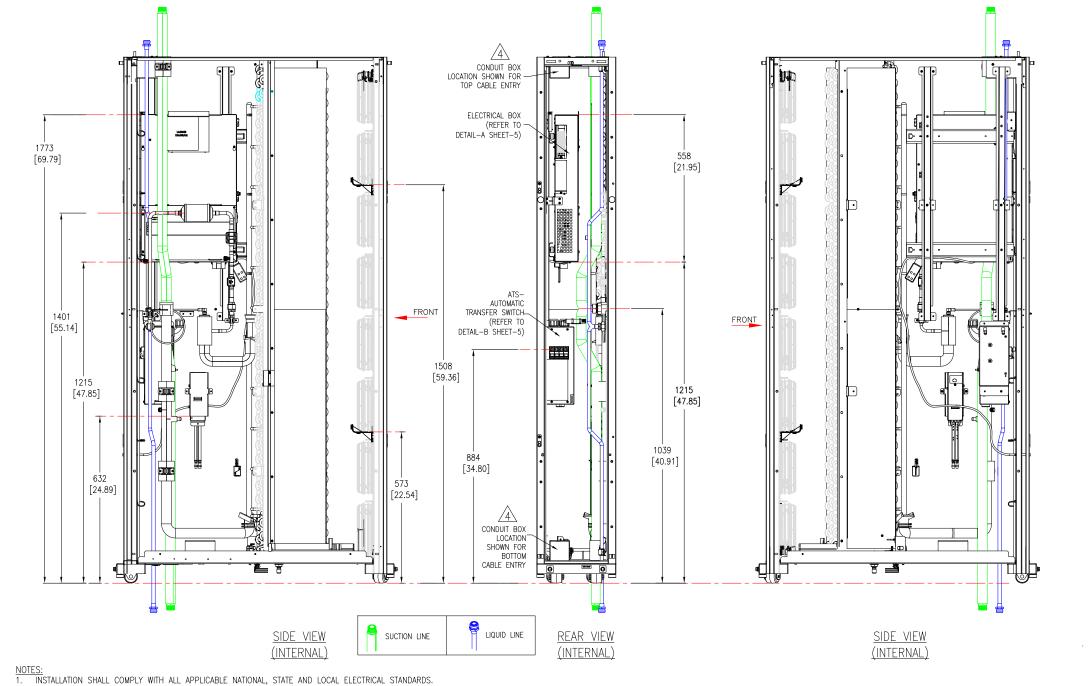
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 CONDUIT BOX A QUANTITY OF 1 ONLY SUPPLIED INSIDE THE UNIT, CAN BE MOUNTED IN LOCATIONS AS SHOWN BASED ON TOP OR BOTTOM ENTRY APPLICATION. REFER TO INSTALLATION MANUAL FOR DETAILS.
- 5. SOME STRUCTURAL DETAILS BEEN OMITTED FOR THE PURPOSE OF CLARITY.

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| TITLE: InRow DIRECT EXPANSION |
|--------------------------------------|
| InRow RD 300mm 30kW Indoor Unit |
| DUAL FEED -120-230V, Standard, CE/UL |
| INTERNAL ISOMÉTRIC VIEWS " |

| INROW DIRECT EXPANSION INROW RD 300mm 30kW Indoor Unit | | DWG NO: ACRD301S | | | REV. 1 | |
|--|--|------------------|-----------|----------------|-----------|------------|
| | DUAL FEED -120-230V, Standard, CE/UL INTERNAL ISOMETRIC VIEWS | | DRAWN: | BALA | 10-NOV-20 | FIRST |
| | | | ENGINEER: | RAAM C/K CHENG | 10-NOV-20 | ANGLE |
| | PROJECT: SUBMITTAL DRAWINGS | SHEET 3 OF 6 | APPROVED: | RAAM C/K CHENG | 10-NOV-20 | PROJECTION |



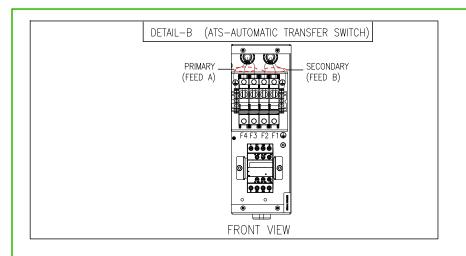
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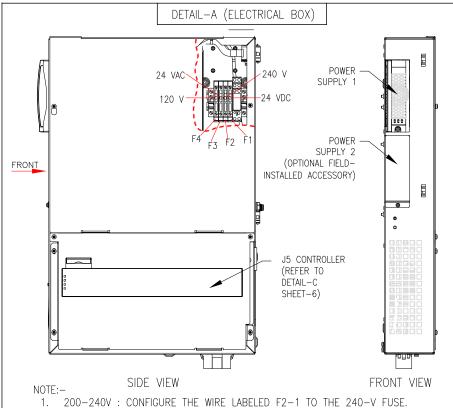
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| IIILE: InRow DIRECT EXPANSION |
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| InRow RD 300mm 30kW Indoor Unit |
| DUAL FEED -120-230V, Standard, CE/UL |
| INTERNAL VIEWS |

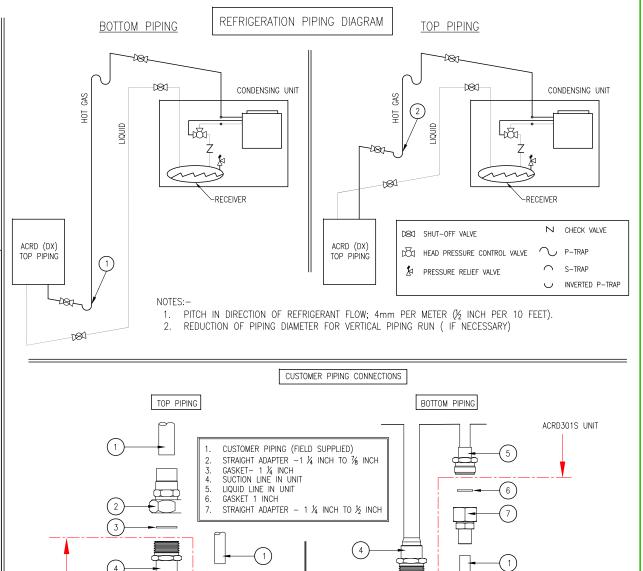
| | TITLE: InRow DIRECT EXPANSION InRow RD 300mm 30kW Indoor Unit | DWG NO: ACRD301S | | | REV. |
|--|---|------------------|----------------|-----------|-----------|
| | DUAL FEED -120-230V, Standard, CE/UL INTERNAL VIEWS | DRAWN: | BALA | 29-SEP-20 | FIRS |
| | | ENGINEER: | RAAM C/K CHENG | 15-0CT-20 | ANGL |
| | PROJECT: SUBMITTAL DRAWINGS SHEET 4 OF 6 | APPROVED: | RAAM C/K CHENG | 15-0CT-20 | PROJECTIC |





- 100-120V: CONFIGURE THE WIRE LABELED F2-1 TO THE 120-V FUSE.
- REFER THE LADDER DIAGRAM INCLUDED WITH THE UNIT FOR MORE INFORMATION.

- INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL STANDARDS.
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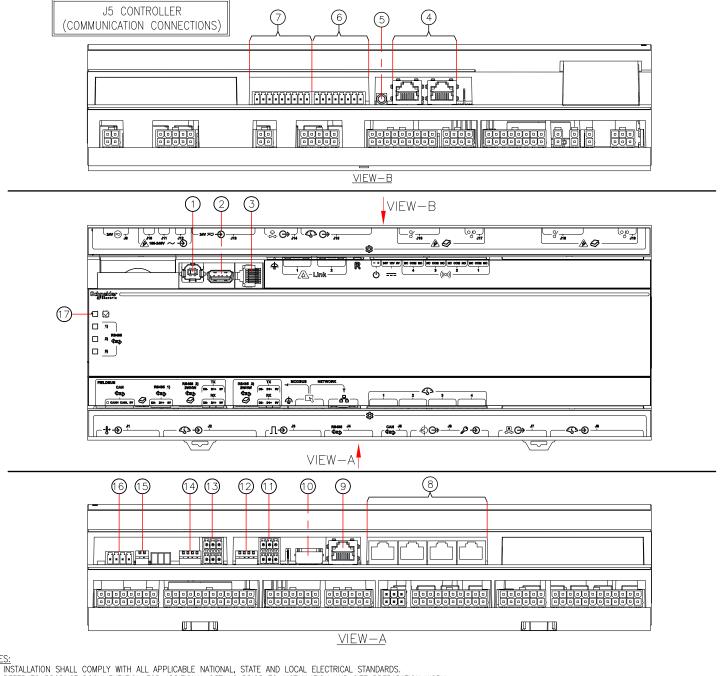
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ACRD301S UNIT



E: InRow DIRECT EXPANSION
InRow RD 300mm 30kW Indoor Unit
DUAL FEED -120-230V, Standard, CE/UL
INTERNAL DETAILS AND
REFRIGERATION PIPING DIAGRAM

ACRD301S DRAWN: 29-SEP-20 FIRS1 ENGINEER: 15-0CT-20 ANGLE RAAM C/K CHENG PROJECT: SUBMITTAL DRAWINGS SHEET 5 OF 6 APPROVED: RAAM C/K CHENG 15-OCT-20 PROJECTION



J5 CONTROLLER (NETWORK CONNECTIONS) INI COOLING $\underline{\mathsf{VIEW-A}}$ St J5 CONTROLLER /HUB COOLING SWITCH, 2nd VIEW-A J5 CONTROLLER /6\ COOLING LAST VIEW-A J5 CONTROLLER

- USB DEVICE PORT
- USB HOST PORT
- SERIAL PORT
- A-LINK PORTS
- RESET BUTTON
- OUTPUT RELAY 4/STANDBY INPUT
- OUTPUT RELAY 1-3
- UNIVERSAL SENSOR PARTS
- NETWORK CONNECTION
- 10. TOUCH SCREEN DISPLAY CONNECTION
- 11. MODBUS CONNECTION
- 12. MODBUS CONFIGURATION SWITCHES
- 13. FIELDBUS MODBUS CONNECTION
- 14. FIELDBUS MODBUS CONFIGURATION SWITCHES
- 15. FIELDBUS CANBUS CONFIGURATION SWITCHES
- 16. FIELDBUS CANBus CONNECTION
- 17. PROCESSOR STATUS LED

- REFER TO PRODUCT DOCUMENTATION FOR ADDITIONAL DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK.
- FOR OUTPUT RELAY DETAILS. MODBUS SWITCH CONFIGURATIONS AND STANDBY INPUTS DETAILS. REFER TO INSTALLATION MANUAL. THE A-LINK BUS CONNECTION ALLOWS A MAXIMUM GROUP OF 20 UNIFLAIR INROW ACRD301S UNITS.
- TO ENABLE UNITS TO FUNCTION AS A GROUP, LINK THEM TOGETHER USING A STANDARD PIN-OUT CAT-5 CABLE WITH RJ-45 CONNECTORS. THE A-LINK BUS MUST BE TERMINATED AT THE 1st AND LAST UNIT INSTALLED IN THE GROUP. AN A-LINK TERMINATOR IS SUPPLIED WITH EACH UNIT.
- THE MAXIMUM WIRE LENGTH FOR THE ENTIRE GROUP MUST NOT EXCEED 500 METERS (1640 FEET) ALL INPUT AND OUTPUT CONNECTIONS SHOULD BE WIRED AS CLASS 2 CIRCUITS.

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| TITLE: InRow DIRECT EXPANSION |
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| InRow RD 300mm 30kW Indoor Ur |
| DUAL FEED -120-230V, Standard, CE/U |
| COMMUNICATION DETAILS ' |

| DUAL FEED -120-230V, Standard, CE/UL COMMUNICATION DETAILS | | DWG NO: ACRD301S | | | REV. | |
|---|-----------------------------|------------------|----------------|----------------|-----------|------------|
| | | DRAWN: | BALA | 29-SEP-20 | FIRST | |
| | | ENGINEER: | RAAM C/K CHENG | 15-0CT-20 | ANGLE | |
| | PROJECT: SUBMITTAL DRAWINGS | SHEET 6 OF 6 | APPROVED: | RAAM C/K CHENG | 15-0CT-20 | PROJECTION |