38AUZ
Air Cooled Condensing Units
50 Hz
with Puron® (R−410A) Refrigerant
Size: 07

Electrical Data Supplement

ELECTRICAL DATA FOR UNITS PRODUCED ON OR AFTER 02/09/2015

NOTE: Read the entire instruction manual before starting the installation.

IMPORTANT: The electrical data contained in this document is only for use with 38AUZ size 07 50 Hz units produced on or after 02/09/2015. This supplement supersedes the Electrical Data found in the current Installation Instructions for these units. Retain this document and keep it with the unit's Installation Instructions.

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloths for brazing operations and have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions attached to the unit. Consult local building codes and appropriate national electrical codes (in USA, ANSI/NFPA70, National Electrical Code (NEC); in Canada, CSA C22.1) for special requirements.

It is important to recognize safety information. This is the safety-alert symbol ⚠. When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION, and NOTE. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could cause personal injury or death.

Before performing service or maintenance operations on unit, always turn off main power switch to unit and install lockout tag. Unit may have more than one power switch.

Table 1 – Electrical Data — 38AUZ*07 50 Hz Units

UNIT	V–Ph–Hz	VOLTAGE RANGE‡		COMPRESSOR 1		OFM		POWER SUPPLY		DISCONNECT SIZE	
		MIN	MAX	RLA	LRA	OTY	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
38AUZ*07	400–3–50	360	440	8.0	67	2	.07	12	15	11	71

Legend and Notes for Table 1

LEGEND:

FLA – Full Load Amps
LRA – Locked Rotor Amps
MCA – Minimum Circuit Amps Protection
NEC – National Electrical Code
RLA – Rated Load Amps

‡ Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed limits.

NOTES:

1. The MCA and Fuse values are calculated in accordance with The NEC. Article 440.
2. Motor RLA and LRA values are established in accordance with Underwriters' Laboratories (UL). Standard 1995.
3. **Unbalanced 3-Phase Supply Voltage**
   Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

Example: Supply voltage is 400-3-50

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

AB = 394 v
BC = 401 v
AC = 396 v

$$\text{Average Voltage} = \frac{(394 + 401 + 396)}{3} = \frac{1191}{3}$$

$$= 397$$

Determine maximum deviation from average voltage.
(AB) 397 – 394 = 3 v
(BC) 401 – 397 = 4 v
(AC) 397 – 396 = 1 v
Maximum deviation is 4 v.
Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{397}$$

$$= 1.00\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

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