

Installation Recommendations

Remote Case Installations Only

- 6-inch PVC pipe should be used as a minimum for running the field line set through a slab to avoid damage when installing refrigeration.
- Copper lines should be appropriately sized based off the parameters at the store such as length of run, rise, bends in copper, etc. The contractor or application engineer on site who has all this information should make the determination of proper sizing.
- Use braised connections rather than quick connections for all refrigerant piping.
- Contractors should flow dry nitrogen when brazing copper. This minimizes the formation of copper oxide and reduces risk of contaminate restriction through orifices and filters.
- Refrigeration P-traps should be installed to promote good oil return to the compressor. One should be installed at the base of the riser and an additional installed every 15 feet of vertical run.
- Any penetrations in the case for routing refrigeration or electricals need to be sealed completely to avoid condensate water leaking from the case.
- Additional liquid line solenoids, defrost timers, or other components are not required at the remote condensing unit. The control at the case is designed to control all functions of the refrigeration system. If additional components are installed at the remote condensing unit, they should be removed before store opening.
- A vacuum below 500 microns should be pulled prior to charging a system with refrigerant.
- Appropriate winter charge should be added when charging the system with refrigerant. There is a guide inside the electrical panel of each outdoor condensing unit.
- The pressure switch on the outdoor unit should be set based of the store region.
 - See the chart on page 2 for settings.
- Check that the refrigerant being used matches the requirement of the case and remote condensing unit as specified on the order. If SCA provides the remote unit, this would be R449A as standard.
- Ensure factory settings are maintained on the control.
 - See pg. 3-5 for our standard Carel PJEZ settings.

Adjustable Low Pressure Control Setting

Minimum Temperature °F	R449A	
	Cut-in (PSIG)	Cut-out (PSIG)
50	65	20
40	50	20
30	35	20
20	25	5
10	15	0

Adjustable High Pressure
Control Setting

R449
400 PSIG

Failure to follow these recommendations will likely lead to the case failing to perform, causing loss of product, and may cause damage to components which cannot be covered under warranty.

Manuals for individual models are available on our website: <https://southerncasearts.com/resources/>

Factory Control Set Points

Carel PJEZ

Symbol	SCA Default	Parameter	Min.	Max.	Def.	UOM
PS	22	PASSWORD				
/		PROBE PARAMETERS				
/2	8	MEASUREMENT STABILITY	1	15	4	
/4	1	SELECT PROBE/INPUT DISPLAYED	1	3	1	
/5	1	SELECT °C/°F (0=°C; 1=°F)	0	1	0	
/6	1	DISABLE DECIMAL POINT	0	1	0	
/7	-	ENABLE PROBE 2 ALARM (PJEZM ONLY)	0	1	0	
/C1	0	PROBE 1 CALIBRATION	-12.7	12.7	0	°C/°F
/C2	0	PROBE 2 CALIBRATION	-12.7	12.7	0	°C/°F
/C3	0	PROBE 3 CALIBRATION	-12.7	12.7	0	°C/°F
r		CONTROL PARAMETERS				
St	28	CONTROL TEMPERATURE	R1	R2	4	°C/°F
r1	20	MINIMUM SET POINT ALLOWED	-50	R2		°C/°F
r2	60	MAXIMUM SET POINT ALLOWED	R1	150	90	°C/°F
r3	0	OPERATING MODE (0=DIRECT+DEFROST; 1=DIRECT; 2=REVERSE)	0	2	0	
r4	0	AUTOMATIC NIGHTTIME SET POINT VARIATION	-50	50	3	°C/°F
rd	4	CONTROL DIFFERENTIAL	0	19	2	°C/°F
c		COMPRESSOR PARAMETERS				
c0	0	COMP. AND FAN START DELAY AFTER START UP	0	100	0	MIN.
c1	0	MIN. TIME BETWEEN SUCESIVE COMP. STARTS	0	100	0	MIN.
c2	0	MIN. COMPRESSOR OFF TIME	0	100	0	MIN.
c3	0	MIN. COMPRESSOR ON TIME	0	100	0	MIN.
c4	0	COMPRESSOR SAFETY	0	100	0	MIN.

cc	4	CONTINUOUS CYCLE DURATION	0	15	4	H
c6	2	ALARM BYPASS TIME AFTER CONT. CYCLE	0	15	2	H

Factory Control Set Points

Symbol	SCA Default	Parameter	Min.	Max.	Def.	UOM
d		DEFROST PARAMETERS				
d0	0	TYPE OF DEFROST (0=HEATER; 1=HOT GAS; 2=HEATER BY TIME; 3=HOT GAS BY TIME; 4=HEATER BY TIME WITH TEMP. CONT.)	0	4	0	
dl	4	INTERVAL BETWEEN TWO DEFROST	0	199	8	
dt	47	END DEFROST TEMPERATURE	50	127	4	°C/°F
dP	40	MAX. OR EFFECTIVE DEFROST DURATION	1	199	30	MIN/S
d4	0	DEFROST WHEN THE INSTRUMENT IS SWITCHED ON (1=ACTIVATED)	0	1	0	MIN
d5	0	DEFROST DELAY ON START UP OR FROM DIGITAL INPUT	0	199	0	MIN
d6	0	DISABLE TEMPERATURE DISPLAY DURING DEFROST (1=DISABLED)	0	1	1	
dd	1	DRIPPING TIME AFTER DEFROST	0	15	2	MIN
d8	1	ALARM BYPASS TIME AFTER DEFROST	0	15	1	H
d9	0	DEFROST PRIORITY OVER COMP. PROTECTORS (0=NO; 1=YES)	0	1	0	
d/	-	DISPLAY DEFROST PROBE TEMP.				
dc	0	TIME BASED (FOR DEFROST ONLY; 0=H/MIN; 1=MIN/SEC.)	0	1	0	
A		ALARM PARAMETERS				
A0	0	ALARM AND FAN DIFFERENTIAL	-20	20	2	°C/°F
AL	10	LOW TEMP. ALARM THRESHOLD (0=ALARM DISABLED)	-50	150	0	°C/°F
AH	60	HIGH TEMP. ALARM THRESHOLD (0=ALARM DISABLED)	50	150	0	°C/°F
Ad	30	LOW AND HIGH TEMPERATURE ALARM DISPLAY	0	199	0	MIN
A4	0	DIGITAL INPUT CONFIGURATION	0	11	0	
A7	0	EXTERNAL ALARM DETECTION DELAY	0	199	0	MIN

A8	0	ENABLE ALARM 'ED': END DEFROST BY TIMEOUT (1=ENABLED)	0	1	0	
Ac	0	HIGH CONDENSER TEMPERATURTE ALARM	-50	150	70	°C/°F
AE	0	HIGH CONDENSER ALARM DIFFERENTIAL	0.1	20	5	°C/°F
Acđ	0	HIGH CONDENSER TEMP. ALARM DELAY	0	250	0	MIN
H		OTHER SETTINGS				
H0	1	SERIAL ADDRESS	0	207	1	
H1	0	AUX. OUTPUT CONFIGURATION	0	3	0	
H2	1	ENABLE KEYPAD (0=DISABLED; 1=ENABLED; 3=ENABLED EXCEPT ON/OFF)	0	2	1	
H4	0	DISABLE BUZZER (0=ENABLED; 1=DISABLED)	0	1	0	
H5	-	KEY ID CODE FROM SUPERVISOR		199	1	
EZY		SELECT EASY SET	0	4	0	

Carel PJEZ (continued)