

# REFRIGERANT AND OIL CHARGING PROCEDURE FOR R-134a

# The following steps must be followed to ensure optimum system performance and maximum compressor life:

- 1. All refrigeration work is to be performed by qualified technician with proper certification.
- 2. Always wear adequate eye protection when working with refrigerant.
- 3. Leak check the entire a/c system with nitrogen only (not compressed air).
- 4. Nitrogen purge the system prior to evacuation.
- 5. Evacuate the system to 500 microns, Isolate Vacuum pump & wait 5 minutes, Read micron-gauge (Not rise more than 500 microns).
- 6. Add correct oil and refrigerant according to the charge chart.

#### **CAUTION:**

- 1. When leak checking with nitrogen, pressure not to exceed 250 PSIa
- 2. Use of refrigerant oil other than the type and amount specified by the PROAIR oil selection chart will void warranty.
- 3. Never add oil or liquid refrigerant to the suction side of system.
- 4. Consult the PROAIR service department with any questions at 877-228-4247.

## REFRIGERANT AND OIL CHARGE CHART

## \*Please consult PROAIR in regards to charge/oil amounts for any Eberspächer Rooftop A/C system

Evaporator	Condenser	Oil Amount	R-134a Amount
EV-10, EZ-3, EZ-30, EZ-35, ID-23	CS-2, CS-22*	6 oz.	4 lbs.
EV-1, EV-2, EV-20, EZ-4, EZ-5, EZ-55, EZ-6, EZ-7, EV-8	CS-2, CS-2L, CR-2	7.5 oz.	5 lbs.
EV-1, EV-2, EV-20, EZ-4, EZ-5, EZ-55, EZ-6, EZ-7, EV-8	CS-3, CS-3L, CR-3 CS-32	9 oz.	6 lbs.
RTS-75 / RTS-275	RTS-75	9.5 oz.	6.25 lbs.
EZ-9	DUAL CS-2, DUAL CR-2	7.5 oz. (ea. system)	5 lbs. (ea. system)
EZ-9	DUAL CS-3, CS-32 DUAL CR-3, CS-32	9 oz. (ea. system)	6 lbs. (ea. system)
EZ-9	SINGLE CS-3, CS-32 SINGLE CR-3, CS-32	9 oz.	6 lbs. SEE NOTE 4
EZ-91 or EV-96 w/ #12 or #16 SUCTION HOSE	SINGLE CS-3, CS-32 SINGLE CR-3, CS-32	9 oz.	6 lbs.
ANY PROAIR EVAPORATOR	CR-4 DUAL OR SINGLE CIRCUIT	Consult PROAIR	Consult PROAIR
Tie-in evaporator to above system		1.5-2.25 oz.	1-1.5 lbs.
*CS-22 with tie-in evaporator - Consult PROAIR			

## NOTE:

- 1. All refrigerant oil must be the exact oil specified by the compressor manufacturer. (See chart below)
- 2. Refrigerant amounts are approximate. Use the sight glass to top off the charge. Additional oil may be necessary at 1.5 oz. of oil for each additional pound of refrigerant or 2 oz. of oil for each additional pound of refrigerant if there is a suction accumulator.
- 3. The condenser sight glass will be free of bubbles when the unit is properly charged. Note: Some flash gas may occur at engine idle.
- 4. The a/c system must be piped according to the appropriate PROAIR piping diagram.

## Oil Selection Chart

Compressor Manufacturer	Oil Type	Viscosity	ACT/PROAIR Part No.
Valeo, Que, Sanden	PAG	46 @ 40ºC.	PAG-046-2
Transit Style Compressor/Electric Compressor	Consult PROAIR		