

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 A.C.T. oil selection chart will void warranty.
3. Never add oil or liquid refrigerant to the suction side of system.
4. Consult the A.C.T. service department with any questions at 877-228-4247.

Refrigerant and Oil Charge Chart

Please consult A.C.T. 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-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 A.C.T. EVAPORATOR	CR-4 DUAL OR SINGLE CIRCUIT	Consult A.C.T.	Consult A.C.T.
Tie-in evaporator to above system		1.5-2.25 oz.	1-1.5 lbs.
*CS-22 with tie-in evaporator - Consult A.C.T.			

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 A.C.T. piping diagram.

Oil Selection Chart

Compressor Manufacturer	Oil Type	Viscosity	ACT Part No.
Valeo, Que, Sanden	PAG	46 @ 40°C.	PAG-046-2
Transit Style Compressor	Consult A.C.T.		

Please contact the American Cooling Technology Service Department with any questions, Toll Free: 877-228-4247.