

# ULDC With DC Motor

For mobile use – cooling capacity up to 40 HP



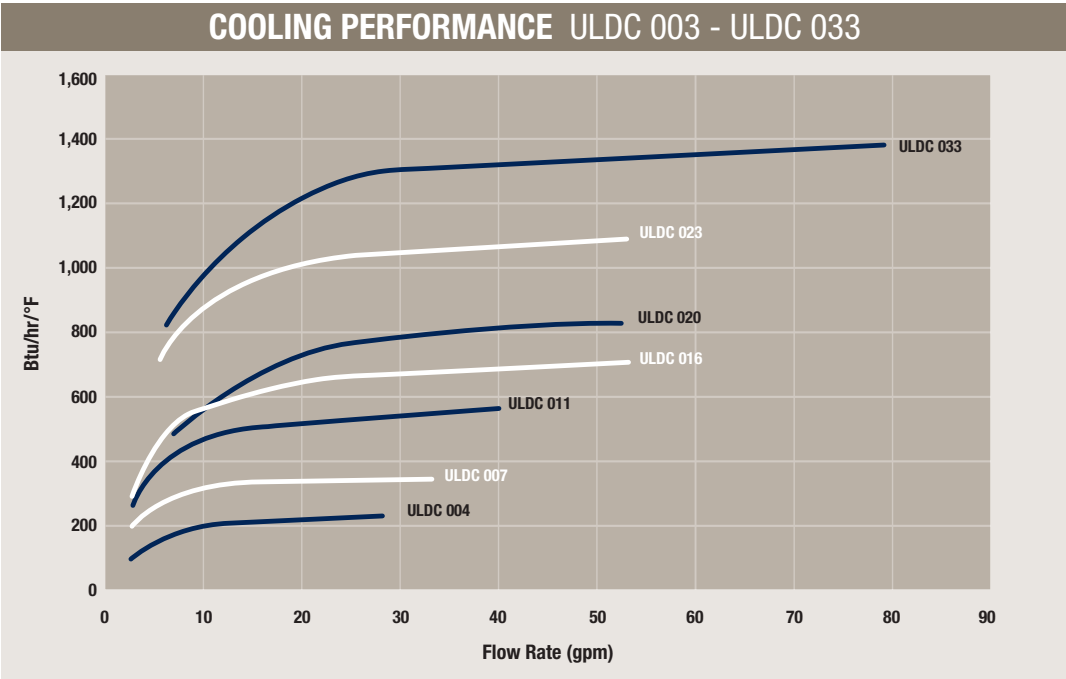
The ULDC oil cooler with 12 or 24V DC motor is optimized for use in the mobile industry. Together with a wide range of accessories, the ULDC cooler is suitable for installation in most applications and environments.

- **Optimized design with right choice of materials and components ensures a reliable and long lasting cooler with low service and maintenance costs.**

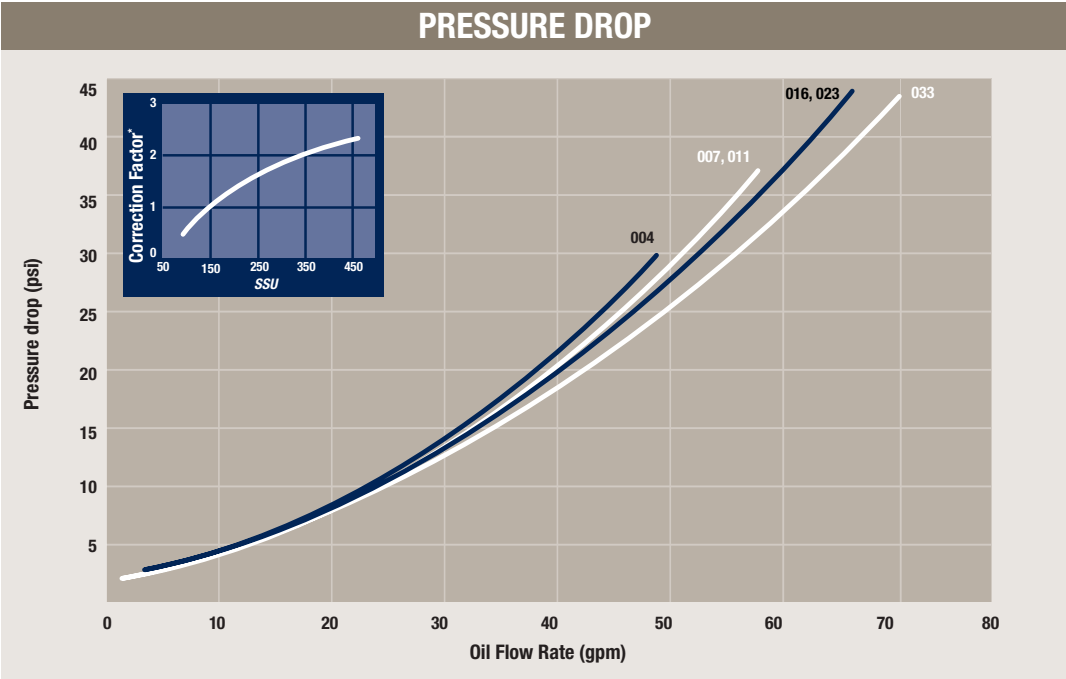
- **Compact design resulting in lighter weight unit yet with higher cooling capacity and lower pressure drop.**
- **Easy to maintain and easy to retrofit into many applications.**
- **DC motor 12V/24V.**
- **Quiet fan and fan motor.**

# ULDC Cooling Performance

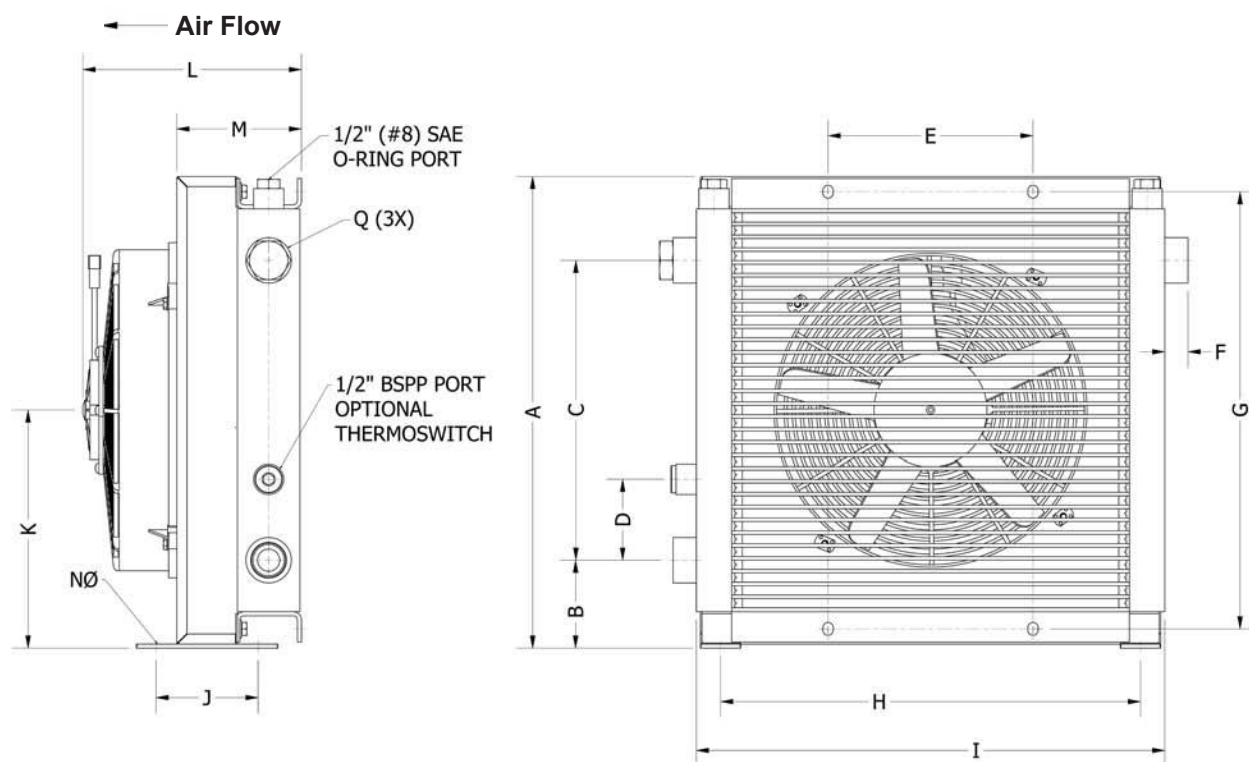
The cooling capacity curves are based on an ETD (Entering Temperature Difference) of 1 °F. For example, oil temperature of 140 °F and air temperature of 70 °F yields a temperature difference of 70 °F. Multiply the number from the cooling graphs corresponding to the specific flow rate by the ETD for the particular application to get the total heat duty.



Cooling capacity tolerance  $\pm 10\%$ .



\* Pressure Drop Correction Factor for other viscosities.



TYPE	Weight lbs (Approx.)	Acoustic Pressure LpA dB(A) 3 Ft.*	Max. Current (Amps.)**		Q SAE O-Ring Boss
			12 Volts	24 Volts	
ULDC 004	13	68	7	4	1" (#16)
ULDC 007	20	71	13	6	1" (#16)
ULDC 011	26	75	20	12	1" (#16)
ULDC 016	33	75	20	12	1" (#16)
ULDC 020	40	82	20	10	1" (#16)
ULDC 023	55	75	20	12	1" (#16)
ULDC 033	66	75	20	12	1¼" (#20)

\* Noise level tolerance  $\pm 3$  dB(A).

\*\* ULDC-023 & ULDC-033 Cooler assemblies come with two fans each. The indicated max. current is for one fan only.

TYPE	A	B	C	D	E	F	G	H	I	J	K	L	M	NØ dia./oblong
ULDC 004	10.0	3.5	3.5	-	6.0	0.9	9.0	5.3	10.5	5.8	5.2	6.0	4.3	0.35 x 0.55
ULDC 007	13.3	3.7	6.3	3.2	8.0	0.9	11.7	8.0	13.0	10.5	6.8	6.8	4.3	0.35
ULDC 011	15.6	3.4	9.0	3.2	8.0	0.9	14.3	14.2	15.7	4.0	7.9	8.5	4.9	0.35 x 1.1
ULDC 016	18.3	3.4	11.7	3.2	8.0	0.9	17.0	16.4	18.3	4.0	9.3	8.3	4.8	0.35 x 1.1
ULDC 020	20.1	3.0	13.8	2.8	8.0	0.9	18.7	18.5	20.1	4.0	10.1	8.3	4.9	0.35 x 0.55
ULDC 023	25.0	5.4	14.9	3.2	14.0	-	20.2	-	24.2	11.4	7.9/18.0	8.6	4.9	0.51
ULDC 033	26.7	3.4	19.1	3.2	14.0	1.0	24.5	-	25.0	11.4	7.9/18.0	10.1	6.5	0.51

All dimensions listed above are in inches.

## Order Key for ULDC Oil Coolers

All positions must be filled in when ordering.

EXAMPLE:					
ULDC	-	007	- A	- 000	SA
Series		Model	Motor Type	Thermoswitch	Core Bypass
1		2	3	4	5

1. OIL COOLER SERIES WITH DC MOTOR; ULDC	
2. COOLER SIZE/MODEL	
004, 007, 011, 016, 020, 023, 033	
3. MOTOR VOLTAGE	
12 V	= A
24 V	= B
4. THERMOSWITCH	
No thermoswitch	= 000
100 °F	= 100
120 °F	= 120
140 °F	= 140
160 °F	= 160
175 °F	= 175
5. CORE BYPASS*	
No Bypass	= SW
20 psi External Hose Bypass	= SA
65 psi External Hose Bypass	= SB

\* The standard cores are single pass. Two pass cores and other options available upon request, please consult Accumulator and Cooler Division.

## Technical Specifications

<b>FLUID COMBINATIONS</b>	
Mineral oil	
Oil/water emulsion	
Water glycol	
Phosphate ester	
<b>MATERIAL</b>	
Cooler core	Aluminum
Fan blades/guard	Glass fiber reinforced polypropylene
Fan housing	Steel
Other parts	Steel
Surface treatment	Electrostatically powder-coated
<b>COOLER CORE</b>	
Maximum static working pressure	300 psi
Dynamic working pressure	200 psi*
Heat transfer tolerance	± 6 %
Maximum oil inlet temperature	250 °F
* Tested in accordance with ISO/DIS 10771-1	
<b>COOLING CAPACITY CURVES</b>	
The cooling capacity curves in this catalogue are created using oil type ISO VG 46 at 250 °F.	
<b>CONTACT PARKER FOR ADVICE ON</b>	
Oil temperatures > 250 °F	
Oil viscosity > 100 cSt / 500 SSU	
Aggressive environments	
Environments with heavy airborne particulates	
High-altitude locations	



Bypass Valve

