



THE NEXT GENERATION OF COOL

# MOBILE OIL COOLER SERIES

High-performance Standard Coolers built for mobile equipment

IEAcooling.com  
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9625 55TH STREET, KENOSHA, WI 53144



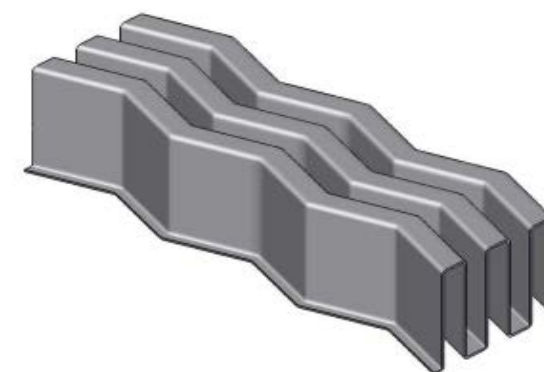
# THE NEXT GENERATION OF COOL

## COOLING THAT GETS THE JOB DONE

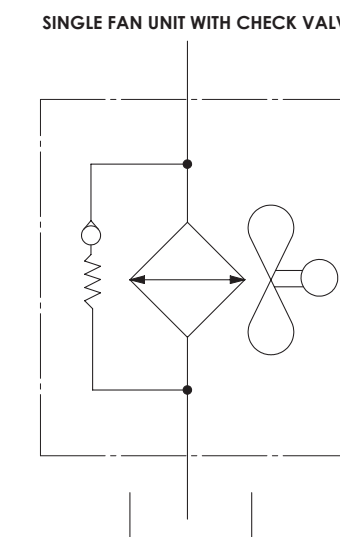
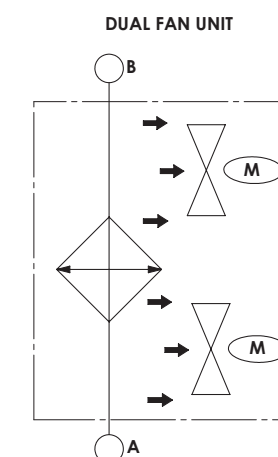
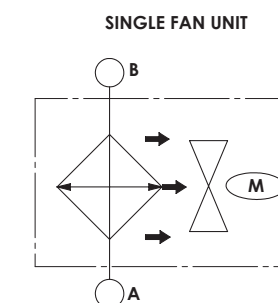
For tough jobs, you need a cooler that can keep pace with your mobile equipment. Lightweight and durable, the new mobile oil cooler series is built to handle the demands of the work. And like all IEA heat exchangers, they come in a variety of sizes that can be customized to fit your needs.



## SERIES HIGHLIGHTS



High-performance, low-fouling air fin

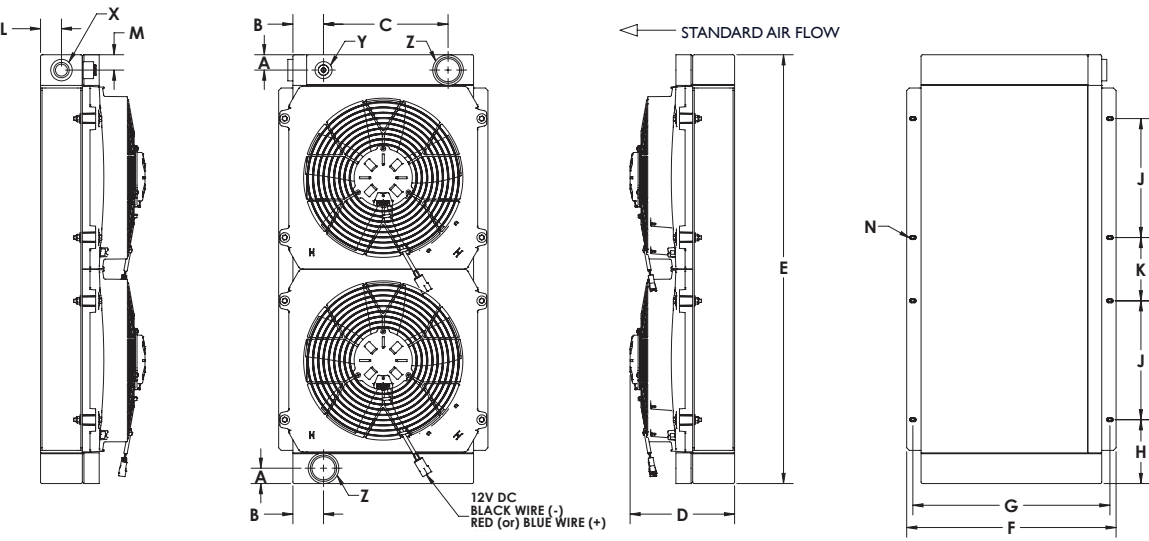


- Designed for hydraulic oil, lube oil, fuel cooling, or auxiliary cooling
- 12 VDC suction fans standard, other options available
- Rated flows up to 80 GPM; 60 GPM for bypass check valve option
- Long motor lifetime up to 16,000 hours on most standard fans
- Built-in thermostat available
- Pressure rating up to 300 PSI
- Non-louvered, low-fouling air fin
- All SAE ORB ports
- Aluminum bar and plate construction
- IP68 low-noise fans with waterproof connector
- Made of non-corrosive materials





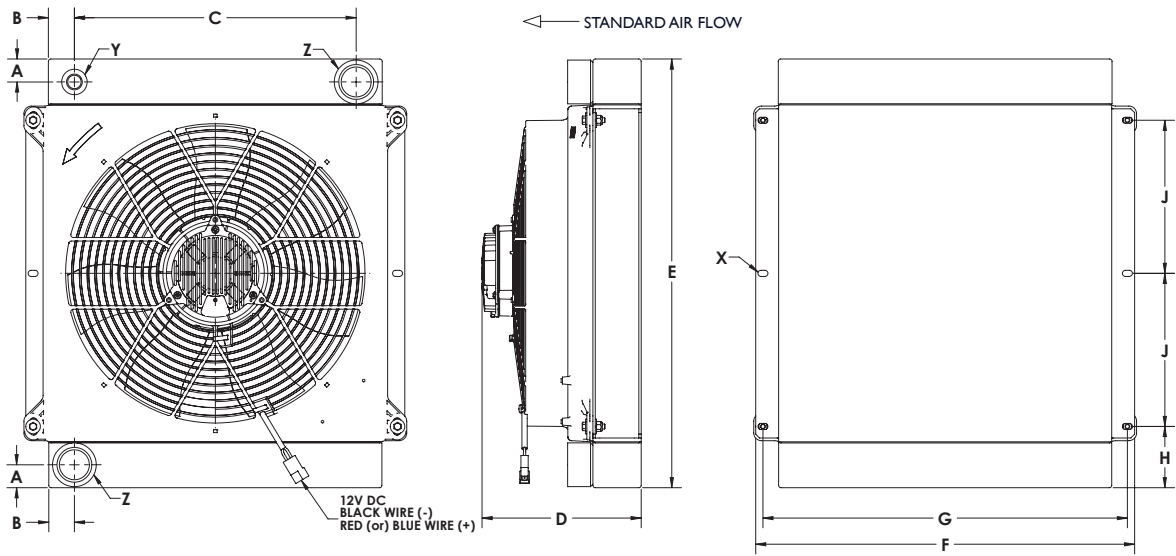
# TWIN FAN



SIZE	A	B	C	D	E	F	G	H	J	K	X	Y	Z
4.15	1.18	1.32	14.49	8.93	39.96	19.49	18.74	3.44	15.75	1.57	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
2.75	1.18	1.97	10.00	8.06	33.46	16.14	15.20	5.11	9.17	4.88	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)

All dimensions are in inches

# SINGLE FAN

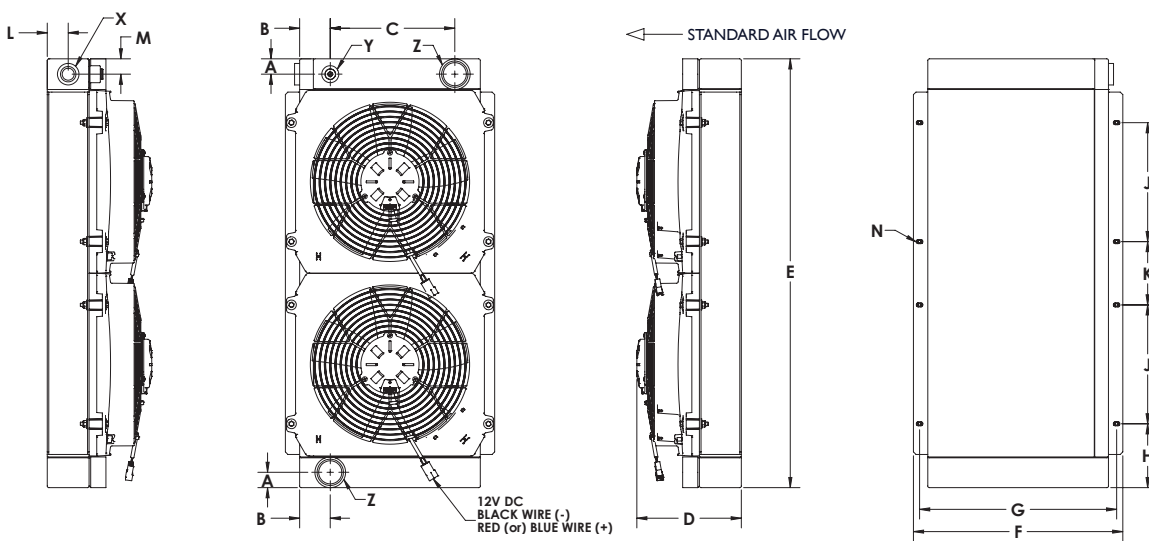


SIZE	A	B	C	D	E	F	G	H	J	X	Y	Z
2.00	1.18	1.32	14.49	8.18	22.44	19.49	18.74	3.34	7.87	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
1.36	1.18	1.97	10.00	7.31	19.17	16.06	15.20	5.19	4.59	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
1.00	1.18	1.42	9.53	6.37	17.12	14.96	14.21	4.62	3.94	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
0.50	.83	1.02	5.51	6.26	13.58	9.53	8.78	3.63	3.15	.31 X .51	3/4-16 UNF-2B (SAE #8)	1 1/16-12 UN-2B (SAE #12)

All dimensions are in inches



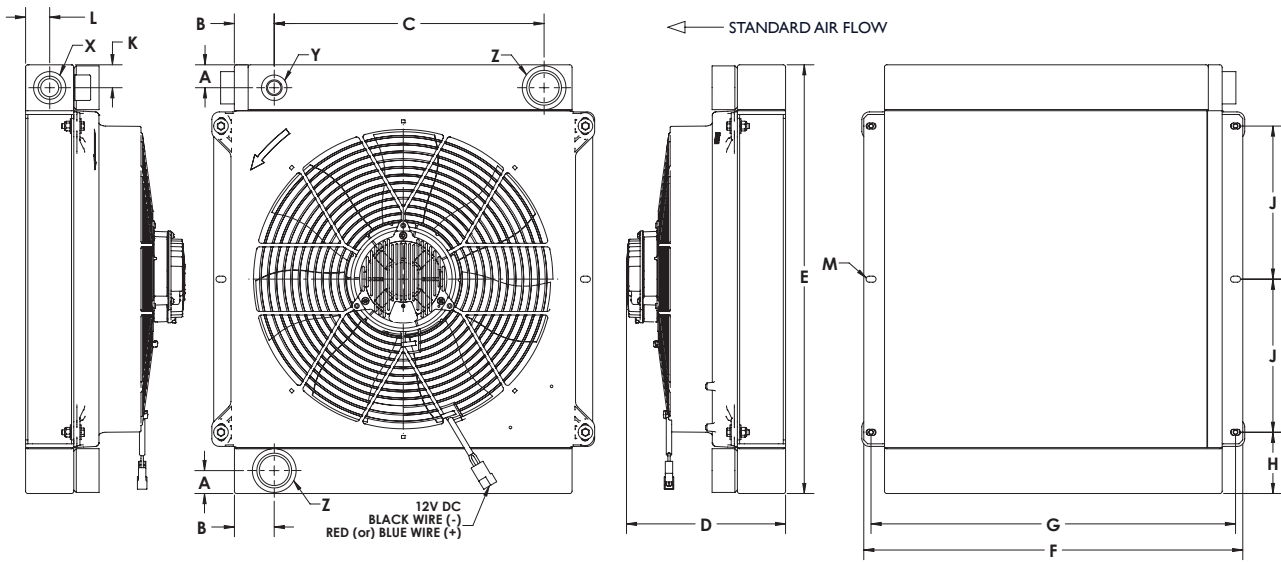
# BYPASS TWIN FAN



SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	X	Y	Z
4.15	1.18	2.38	13.43	8.93	39.96	19.49	18.74	3.44	15.75	1.57	1.61	1.18	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
2.75	1.18	2.36	9.61	8.06	33.46	16.14	15.20	5.11	9.17	4.88	1.61	1.18	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)

All dimensions are in inches

# BYPASS SINGLE FAN



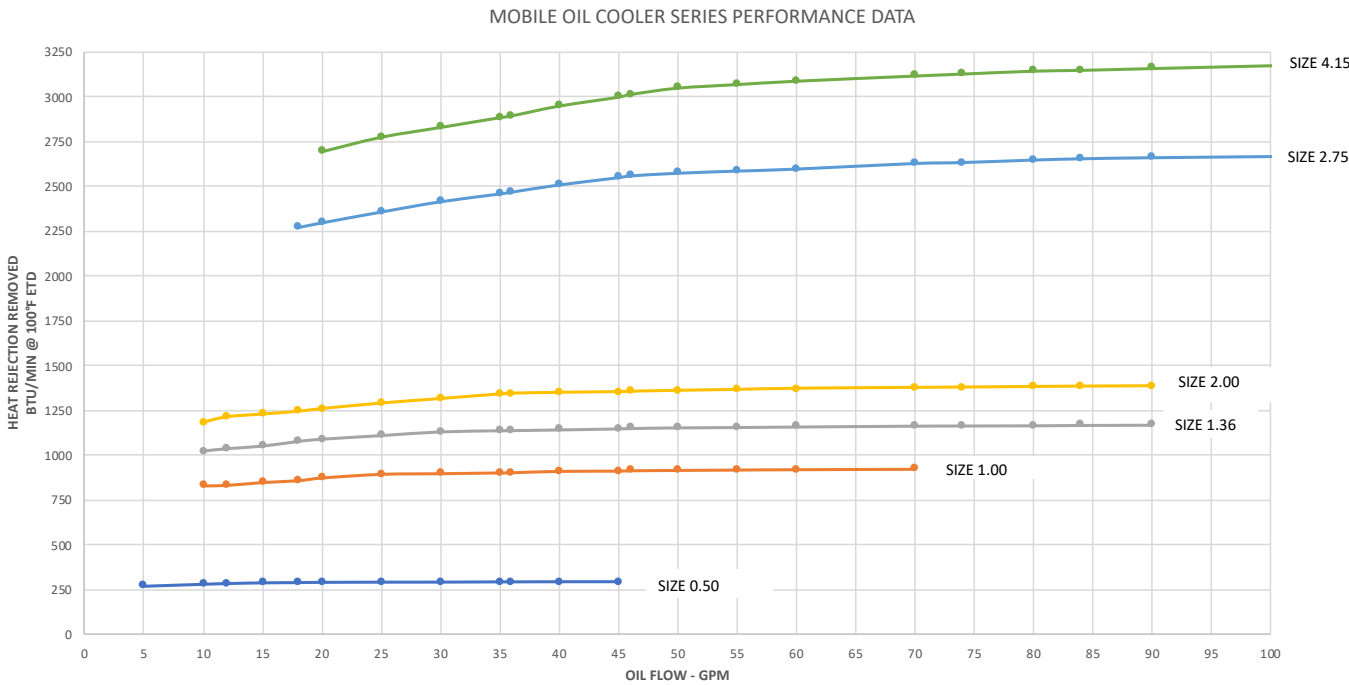
SIZE	A	B	C	D	E	F	G	H	J	K	L	M	X	Y	Z
2.00	1.18	2.05	13.88	8.18	22.44	19.49	18.74	3.34	7.87	1.18	1.24	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
1.36	1.18	2.09	10.00	7.31	19.17	16.06	15.20	5.19	4.59	1.18	1.24	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
1.00	1.18	2.17	8.90	6.37	17.12	14.96	14.21	4.62	3.94	1.18	1.24	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 5/8-12 UN-2B (SAE #20)
0.50	.83	2.05	4.61	6.26	13.58	9.53	8.78	3.63	3.15	.94	1.24	.31 X .51	1 5/16-12 UN-2B (SAE #16)	3/4-16 UNF-2B (SAE #8)	1 1/16-12 UN-2B (SAE #12)

All dimensions are in inches



# READY TO GET STARTED?

The performance curves are based on the following: ISO VG46 oil and 100°F Entering Temperature Difference (ETD)



## STEP 1:

Determine heat load – typical application - size cooler for 1/3 of input heat load

$HP \times 42.41 = \text{BTU/MIN}$

## STEP 2:

Determine actual ETD desired

$ETD = \text{Entering oil temperature (°F)} - \text{Entering air temperature (°F)}$

- The entering oil temperature is generally the maximum desired system oil temperature. (~180-200°F)

- The entering air temperature is the highest anticipated ambient air temp, plus any pre-heating of the air prior to entering the cooler. Very important if air is drawn from engine compartment, etc.

## STEP 3:

Calculate the adjusted BTU/MIN for selection

$\text{BTU/MIN Heat Load} \times (100/\text{Desired ETD}) = \text{BTU/MIN for use with chart above}$

## STEP 4:

Select the model size from the curves

Select your oil flow rate from the bottom and find required heat rejection from step 3.

Select the model size that is on or above this point to meet these conditions.

Note: Heat transfer performance with pressure bypass is approximately 2-4% less due to available face area.

# SELECTING YOUR COOLER

If one of our standard models is right for your application, we can get it to you in as little as a week. And with our in-house manufacturing and assembly, even custom coolers are ready when you need them.

## SPECIFICATIONS

Model Size, Sq. Ft.	Fan Diameter (in.)	Motor Voltage (DC)	Approx. Noise level dB(A) @1 m	Number of Fans	Current, A (12v/24v) per fan	Recommended Fuse per fan (A)	Approx. Weight (lbs.)
0.50	7.5	12/24	78	1	5.3/3.4	15/10	11
1.00	11	12/24	83	1	17/7.8	30/20	23
1.36	12	12/24	89	1	20.6/10.5	30/20	28
2.00	15	12/24	89	1	20.8/10.6	30/20	38
2.75	12	12/24	89	2	20.6/10.5	30/20	58
4.15	15	12/24	89	2	20.8/10.6	30/20	81

## CUSTOM ORDERING

Create your own model code by choosing from our list of customization options.

### 1. MODEL SERIES

☒ OCLV

### 2. MODEL SIZE

Tell us what size you need: \_\_\_\_\_ sq. ft.

### 3. DC FAN

Select from:

- ☐ **I2S** – 12V Suction Fan (Standard)  
☐ **I2B** – 12V Blowing Fan  
☐ **24S** – 24V Suction Fan  
☐ **24B** – 24V Blowing Fan

\*Blowing fan is not available for size 0.50.

### 4. TEMP SWITCH

Select from:

- ☐ **Blank** – No Switch  
☐ **TS120** – 120°F  
☐ **TS140** – 140°F

### 5. PRESSURE CHECK VALVE

Select from:

- ☐ **Blank** – No Check Valve  
☐ **30** – 30 PSI  
☐ **60** – 60 PSI

### FINAL MODEL NUMBER:

OCLV — — — — —  
1 2 3 4 5

If you are interested in an EMC filter or a soft start fan, contact your Sales Representative