

## Universal Cooler

Based on the concept of designing custom engineered coolers using standard components, TEMAC goes beyond the norm by applying this logic to the complete cooling package. The introduction of the Universal Cooler product line offers the user the flexibility of using one design to cool air, oil, hydraulic fluid and any fluid that can be effectively cooled using an aluminum heat exchanger. What makes the Universal Cooler so unique is the selection of cooler components and the ability to quickly adapt the cooler to meet a specific application requirement by mixing and matching cooler, fan, motor, shroud and guard configurations. As adaptable as the TEMAC universal cooler is, we didn't stop there. The Universal Cooler can be easily mounted in multiple horizontal and vertical arrangements, with and without legs as a stand alone system or part of a chassis mounted design.

### Standard Features

- Design operating pressure of 400 psig at 350F
- All weather construction with powder coat paint protection
- Direct drive 3-phase TEFC electric motor with UL and CSA approval
- Pusher fan configuration
- Rugged steel shroud and fan guard to protect moving parts and personnel
- High efficiency axial fan delivering maximum cooling performance
- 1/4" vent & drain connections

### Optional Features

- Heresite and E-coat paint process for added corrosion protection
- Single Phase AC electric motor, Hydraulic motor, air motor or DC fan motor
- Puller fan configuration

### Typical Applications

- Compressor oil cooling and air aftercooling
- Fluid Power
- Forestry equipment
- Gear Oil cooling
- Genset cooling
- Hydraulic systems
- Machine tools
- Off-highway vehicles and machinery
- On-highway vehicles

## Universal Cooler Motor & Fan Data

Model	1010225	1212225	1414225	1616225	1818225	2020225
Motor HP	1/8	1/6	1/6	1/4	1/2	1/2
Motor RPM	3204	3276	1584	1620 / 1750	1750	1750
Voltage / Frequency	230-460 / 60	230-460 / 60	230-460 / 60	230-460 / 60	230-460 / 60	230-460 / 60
Motor Frame Size	IEC56	IEC63	IEC63	IEC71 / NEMA 56	NEMA 56C	NEMA 56C
Nominal Fan Dia	8	10	12	14	16	16



## Aftercooler Performance Data

Flow Capacity in CFM (14.696 psia, 68 F, 36% RH) 80-125 Psig																									
Inlet Temperature in Degree F		150				200				250				300				350				400			
Approach Temperature in Degree F		5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20	5	10	15	20
Aftercooler Model Number	1010225	55	92	140	216	47	70	95	125	42	60	78	97	39	54	68	82	36	50	62	74	35	47	57	67
	1212225	77	126	190	289	66	98	131	170	60	84	108	133	56	76	95	114	53	71	87	102	50	67	81	94
	1414225	87	138	203	305	76	109	144	184	69	95	120	146	65	87	106	127	62	81	98	114	59	76	91	106
	1616225	130	206	302	452	114	163	214	274	105	143	179	218	98	130	159	189	93	121	146	171	89	115	137	158
	1818225	176	275	403	600	155	219	286	366	142	192	240	293	133	175	214	254	126	164	197	229	121	155	184	212
2020225	281	443	651	975	247	351	460	589	226	307	385	469	212	280	343	406	201	261	315	367	193	247	294	339	

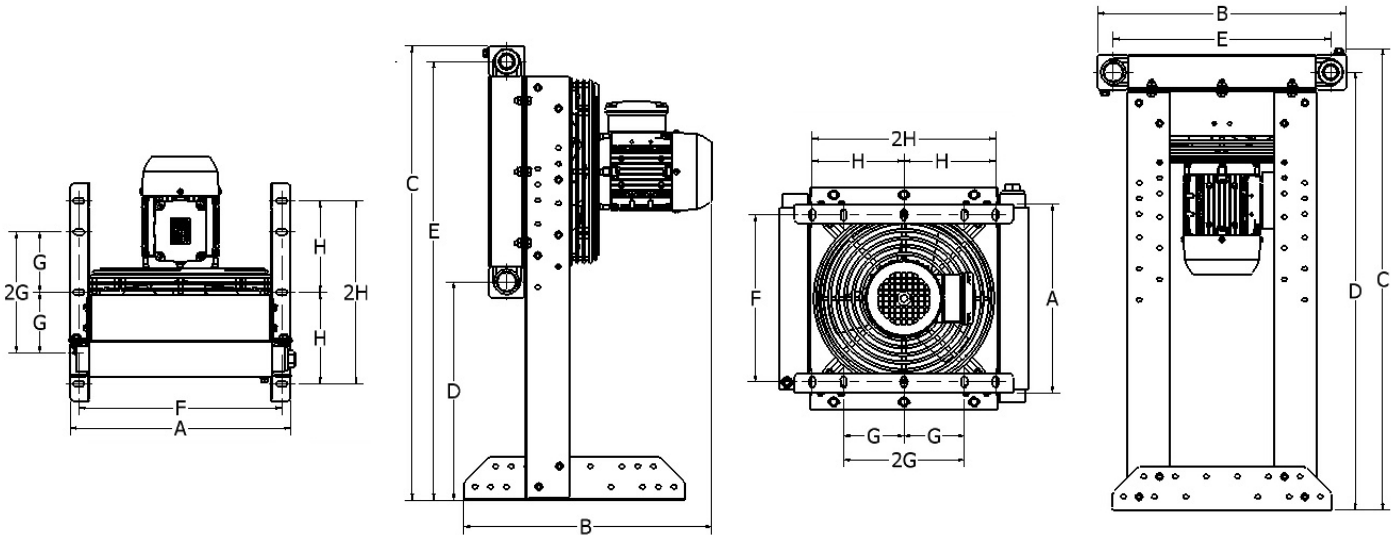
## Aftercooler Selection Procedure

1. Enter the top of the table by locating the approximate cooler inlet temperature and desired approach temperature.
2. Scroll down the column for the desired approach temperature until the required flow is equal to or greater than the rated CFM. Then scroll to the left to determine the appropriate model number.
3. Consult the factory for larger capacities or specific temperature/pressure requirements.

## Notes:

1. Performance is based on air at 14.7 PSIA, 68°F, 36% RH at the compressor inlet.
2. Rated flow is based on thermal performance.
3. Compressed air pressure drop is less than 2 PSI at rated capacities. Flows shown in blue have pressure drops greater than 2 PSI. at designated approach. Consult factory for max flow not to exceed 2 PSI drop.

## Aftercooler Dimensional Data



Model Number	Horizontal Air Flow Configuration									Vertical Air Flow Configuration								
	Overall Width "A"	Overall Depth "B"	Overall Height "C" Low/High	Conn. Size / Type	Outlet Conn. Height "D" Low/High	Inlet Conn. Height "E" Low/High	Foot Mntg. Hole Width "F"	Foot Mntg. Hole Dist. "G/H"	Foot Mntg. Slotted Hole Descr.	Overall Width "A"	Overall Depth "B"	Overall Height "C"	Conn. Size/Type	Outlet Conn. Height "D"	Conn. Spacing "E"	Foot Mntg. Hole Width "F"	Foot Mntg. Hole Dist. "G/H"	Foot Mntg. Slotted Hole Descr.
1010225	10.13	15.13	28.75 / 32.25	1.0" NPT	15.94 / 19.44	27.88 / 31.38	8.75	3.88 / 5.88	3/8 x 3/4	10.13	13.94	29.56	1.0" NPT	28.06	11.94	8.75	3.88 / 5.88	3/8 x 3/4
1212225	12.13	15.75	28.75 / 33.25	1.25" NPT	13.81 / 18.31	27.88 / 32.38	10.75	3.88 / 5.88	3/8 x 3/4	12.13	15.94	29.56	1.25" NPT	28.06	13.94	10.75	3.88 / 5.88	3/8 x 3/4
1414225	14.13	15.75	28.75 / 34.25	1.25" NPT	12.81 / 18.31	27.88 / 33.38	12.75	3.88 / 5.88	3/8 x 3/4	14.13	17.94	29.56	1.25" NPT	28.06	15.94	12.75	3.88 / 5.88	3/8 x 3/4
1616225	18.22	18.69	41.28 / 46.78	1.5" NPT	21.41 / 26.91	40.16 / 45.66	14.81	7.44 / 8.69	3/8 x 3/4	16.13	21.00	41.57	1.5" NPT	40.06	18.75	14.75	7.44 / 8.69	3/8 x 3/4
1818225	20.22	19.81	41.28 / 47.78	1.5" NPT	19.41 / 25.91	40.16 / 46.66	16.81	7.44 / 8.69	3/8 x 3/4	18.13	23.00	41.57	1.5" NPT	40.06	20.75	16.75	7.44 / 8.69	3/8 x 3/4
2020225	22.22	19.81	41.28 / 48.78	2.0" NPT	17.41 / 24.91	39.66 / 47.16	18.81	7.44 / 8.69	3/8 x 3/4	20.13	25.00	41.57	2.0" NPT	40.06	22.25	18.75	7.44 / 8.69	3/8 x 3/4