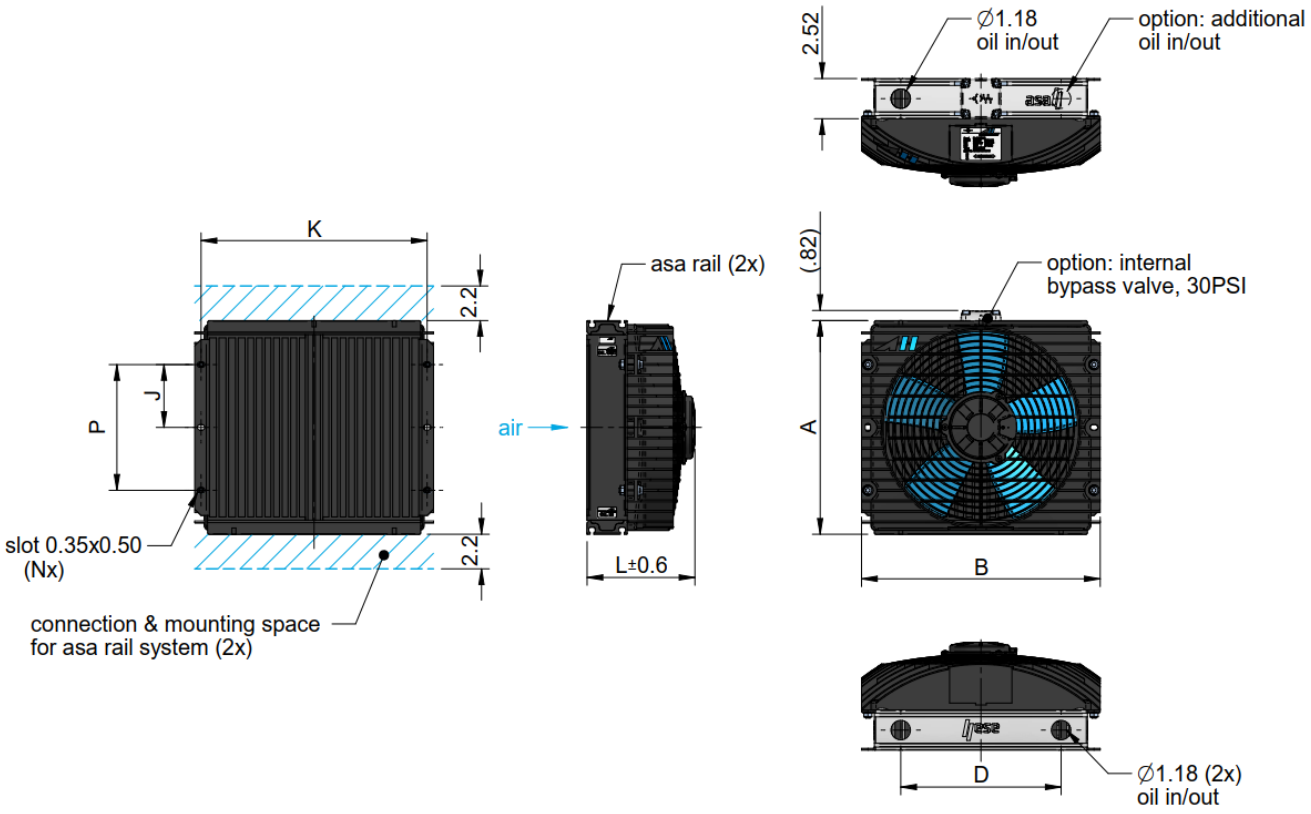
Oil / Air Cooler
Standard Range TT Rail Series
12V / 24V DC , asa rail system



Dimensions

order number	description	A	B	D	J	P	K	L	N	weight
		[in]	[in]	[in]	[in]	[in]	[in]	[in]		[lbs]
ASATT05RD01U00	TT 05 rail 12V DC	9.25	9.65	4.65	-	5.90	8.86	5.91	4	9.48
ASATT05RD02U00	TT 05 rail 24V DC	9.25	9.65	4.65	-	5.90	8.86	5.91	4	9.48
ASATT07RD01U00	TT 07 rail 12V DC	11.81	12.60	6.93	-	6.77	11.42	6.30	4	14.33
ASATT07RD02U00	TT 07 rail 24V DC	11.81	12.60	6.93	-	6.77	11.42	6.30	4	14.33
ASATT07RD03U00	TT 07 rail 12V DC h.p.	11.81	12.60	6.93	-	6.77	11.42	6.93	4	15.43
ASATT07RD04U00	TT 07 rail 24V DC h.p.	11.81	12.60	6.93	-	6.77	11.42	6.93	4	15.43
ASATT11RD01U00	TT 11 rail 12V DC	13.39	14.96	10.04	3.94	7.87	14.17	6.89	6	20.28
ASATT11RD02U00	TT 11 rail 24V DC	13.39	14.96	10.04	3.94	7.87	14.17	6.89	6	20.28
ASATT13RD01U00	TT 13 rail 12V DC	16.54	16.14	10.04	-	9.17	15.20	7.87	4	26.46
ASATT13RD02U00	TT 13 rail 24V DC	16.54	16.14	10.04	-	9.17	15.20	7.87	4	26.46
ASATT16RD01U00	TT 16 rail 12V DC	18.31	18.11	13.11	6.02	12.05	17.17	7.48	6	32.12
ASATT16RD02U00	TT 16 rail 24V DC	18.31	18.11	13.11	6.02	12.05	17.17	7.48	6	32.12
ASATT21RD01U00	TT 21 rail 12V DC	23.82	18.19	12.91	8.21	16.42	17.17	9.57	6	32.85
ASATT21RD02U00	TT 21 rail 24V DC	23.82	18.19	12.91	8.21	16.42	17.17	9.57	6	32.85
ASATT21RD03U00	TT 21 rail 12V DC h.p.	23.82	18.19	12.91	8.21	16.42	17.17	10.28	6	44.97
ASATT21RD04U00	TT 21 rail 24V DC h.p.	23.82	18.19	12.91	8.21	16.42	17.17	10.28	6	44.97
ASATT25RD01U00	TT 25 rail 12V DC	23.82	21.85	16.57	8.21	16.42	20.87	10.47	6	50.04
ASATT25RD02U00	TT 25 rail 24V DC	23.82	21.85	16.57	8.21	16.42	20.87	10.47	6	50.04
ASATT36RD01U00	TT 36 rail 12V DC	28.74	23.82	23.46	8.21	16.42	27.85	10.00	6	72.10
ASATT36RD02U00	TT 36 rail 24V DC	28.74	23.82	23.46	8.21	16.42	27.85	10.00	6	72.10

Oil / Air Cooler
Standard Range TT Rail Series
12V / 24V DC , asa rail system

Technical Data

order number	description	motor power	current	protection	air flow	noise level	optional internal bypass (30PSI)
		[HP]	[A]		[CFM]	[dB(A)]	cooler order number
ASATT05RD01U00	TT 05 rail 12V DC	0.15	8.5	IP 68	340	74	ASATT05RD01BPU00
ASATT05RD02U00	TT 05 rail 24V DC	0.15	4.2	IP 68	340	74	ASATT05RD02BPU00
ASATT07RD01U00	TT 07 rail 12V DC	0.17	9.6	IP 68	573	74	ASATT07RD01BPU00
ASATT07RD02U00	TT 07 rail 24V DC	0.19	5.2	IP 68	573	74	ASATT07RD02BPU00
ASATT07RD03U00	TT 07 rail 12V DC h.p.	0.27	15.6	IP 68	716	78	ASATT07RD03BPU00
ASATT07RD04U00	TT 07 rail 24V DC h.p.	0.28	8.1	IP 68	716	78	ASATT07RD04BPU00
ASATT11RD01U00	TT 11 rail 12V DC	0.39	22.6	IP 68	1 020	77	ASATT11RD01BPU00
ASATT11RD02U00	TT 11 rail 24V DC	0.40	11.4	IP 68	1 020	77	ASATT11RD02BPU00
ASATT13RD01U00	TT 13 rail 12V DC	0.39	22.6	IP 68	1 164	77	ASATT13RD01BPU00
ASATT13RD02U00	TT 13 rail 24V DC	0.40	11.4	IP 68	1 164	77	ASATT13RD02BPU00
ASATT16RD01U00	TT 16 rail 12V DC	0.38	21.2	IP 68	1 343	79	ASATT16RD01BPU00
ASATT16RD02U00	TT 16 rail 24V DC	0.40	11.4	IP 68	1 343	79	ASATT16RD02BPU00
ASATT21RD01U00	TT 21 rail 12V DC	0.38	21.2	IP 68	1 468	78	ASATT21RD01BPU00
ASATT21RD02U00	TT 21 rail 24V DC	0.40	11.4	IP 68	1 468	78	ASATT21RD02BPU00
ASATT21RD03U00	TT 21 rail 12V DC h.p.	0.44	25.5	IP 68	1 826	81	ASATT21RD03BPU00
ASATT21RD04U00	TT 21 rail 24V DC h.p.	0.46	13.2	IP 68	1 826	81	ASATT21RD04BPU00
ASATT25RD01U00	TT 25 rail 12V DC	0.38	21.2	IP 68	1 575	78	ASATT25RD01BPU00
ASATT25RD02U00	TT 25 rail 24V DC	0.40	11.4	IP 68	1 575	78	ASATT25RD02BPU00
ASATT36RD01U00	TT 36 rail 12V DC	2x0.39	2x22.6	IP 68	2 900	80	ASATT36RD01BPU00
ASATT36RD02U00	TT 36 rail 24V DC	2x0.40	2x11.4	IP 68	2 900	80	ASATT36RD02BPU00

Radiator Style B

material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin shape:	wavy
working pressure:	370 PSI (static)

Installation System (asa rail connectors)

connection UN 1 $^{5}/_{16}$"	ILLZSET5U16U00(1 set per cooler) required)
connection UN 1 $^{5}/_{8}$"	ILLZSET5U20U00(1 set per cooler) required)

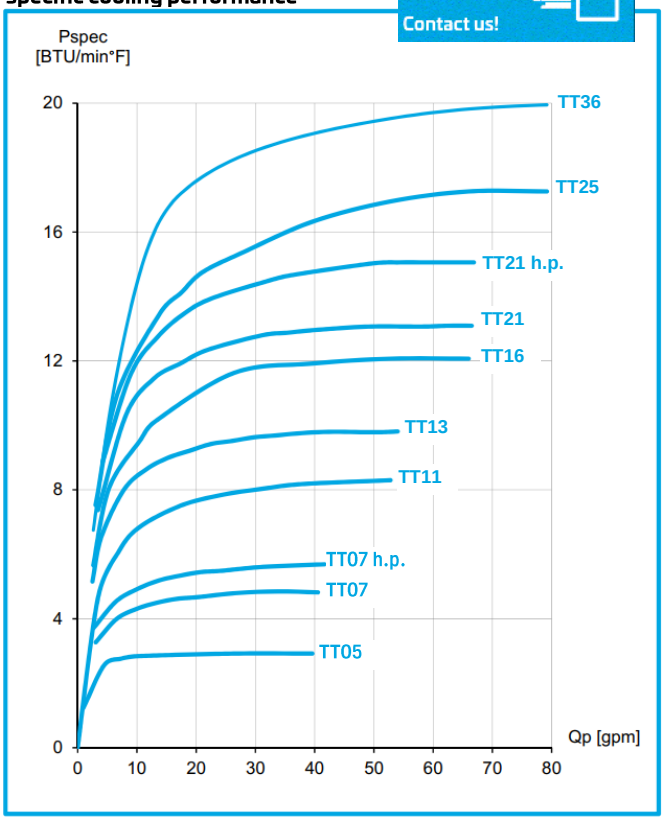
...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.

Oil / Air Cooler
Standard Range TT Rail Series
12V / 24V DC , asa rail system

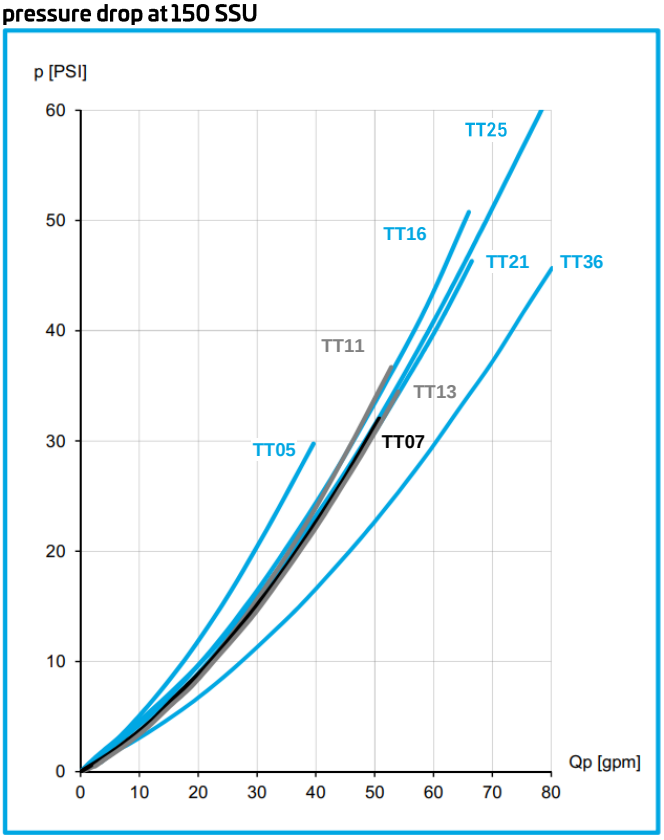
Performance

all products water/glycol compatibel
Contact us!

specific cooling performance



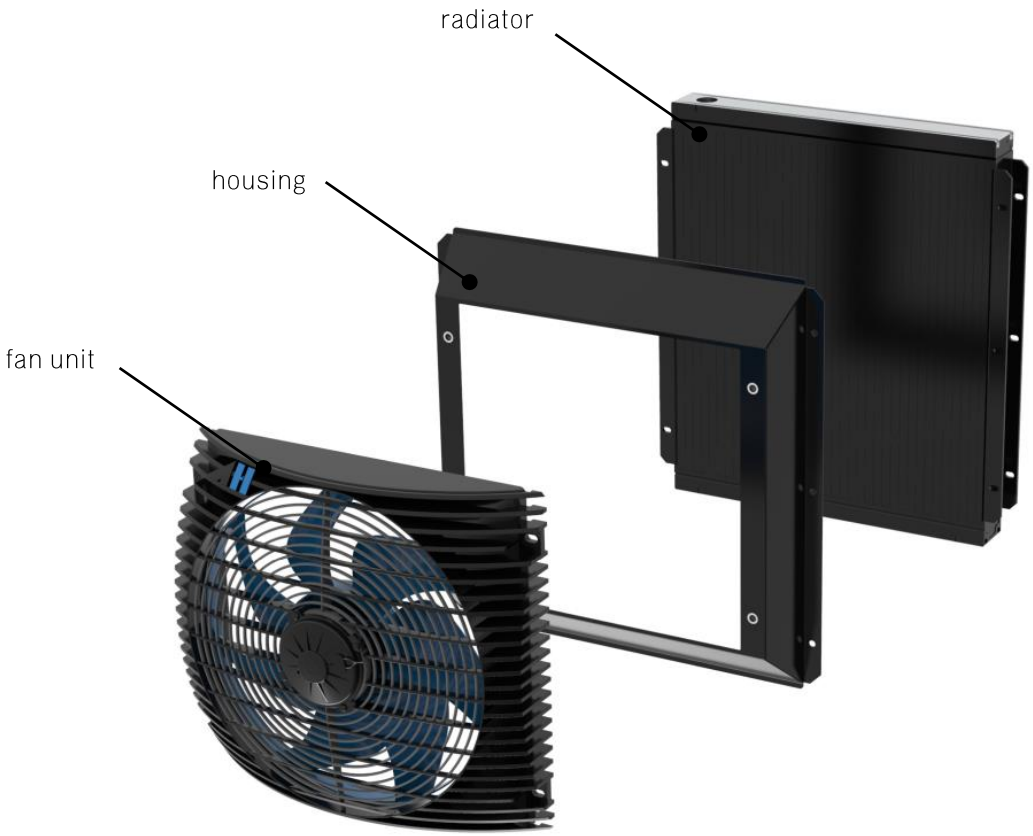
pressure drop at 150 SSU



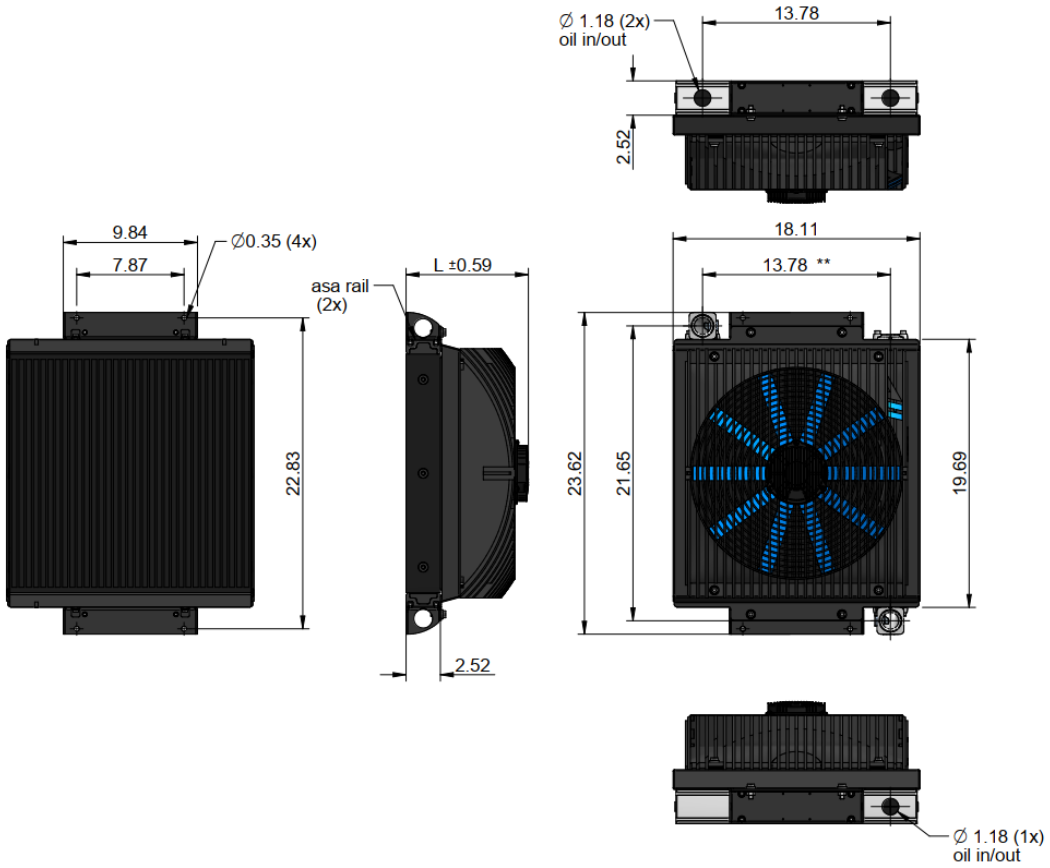
Oil / Air Cooler
Standard Range TT Rail Series
12V / 24V DC , asa rail system

Options

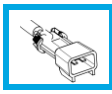
temperature control	ILLZTC12-2KU00 or 24-2KU00 + ILLZTT5069KU00 except TT21 h.p.
temperature switches	ILLZTH5069KU00, ILLZTH4765KU00, ILLZTH6065KU00 (page 51)
protection housings	available for sizes TT 07, 11 and 16
system for rail series	ILLZRF.....U00
foot mounting	ILLEFUSSTTKU00, ILLEFUSSTTHDKU00
internal bypass	alternative bypass settings (1bar / 5bar)



Oil / Air Cooler
Standard Range, TT 20 rail DC
12V / 24V DC



** ...installation example UN 1 5/8"", connector set not included (ILLZESET5G20U00)



fan motor connection:
metri pack 280

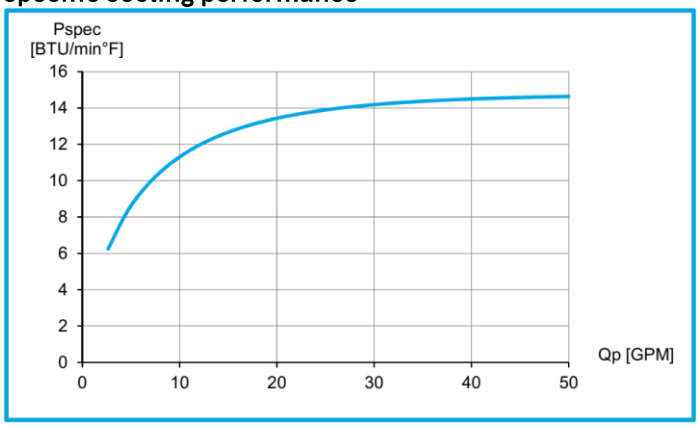
Technical Data

order number	description	power	current	protection	air flow	noise level	L	weight
		[HP]	[A]		[CFM]	[dB(A)]	[mm]	[lbs]
ASATT20RD01U00	TT 20 rail 12V DC	0.38	21,2	IP 68	1468	76	8.98	44
ASATT20RD02U00	TT 20 rail 24V DC	0.30	11,4	IP 68	1468	76	8.98	44

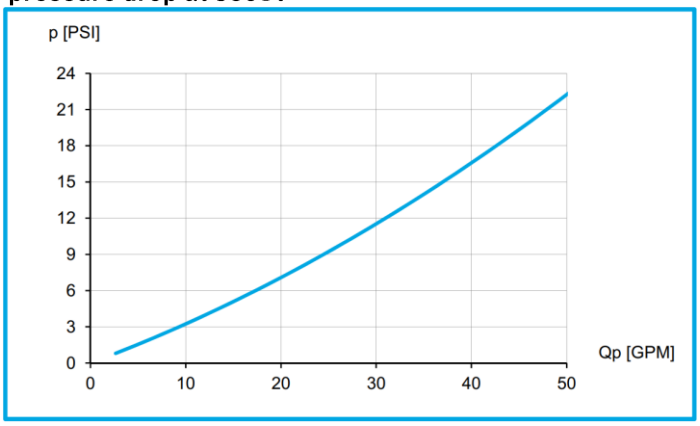
Oil / Air Cooler
Standard Range, TT 20 rail DC
12V / 24V DC

Performance

specific cooling performance



pressure drop at 30cSt



Radiator

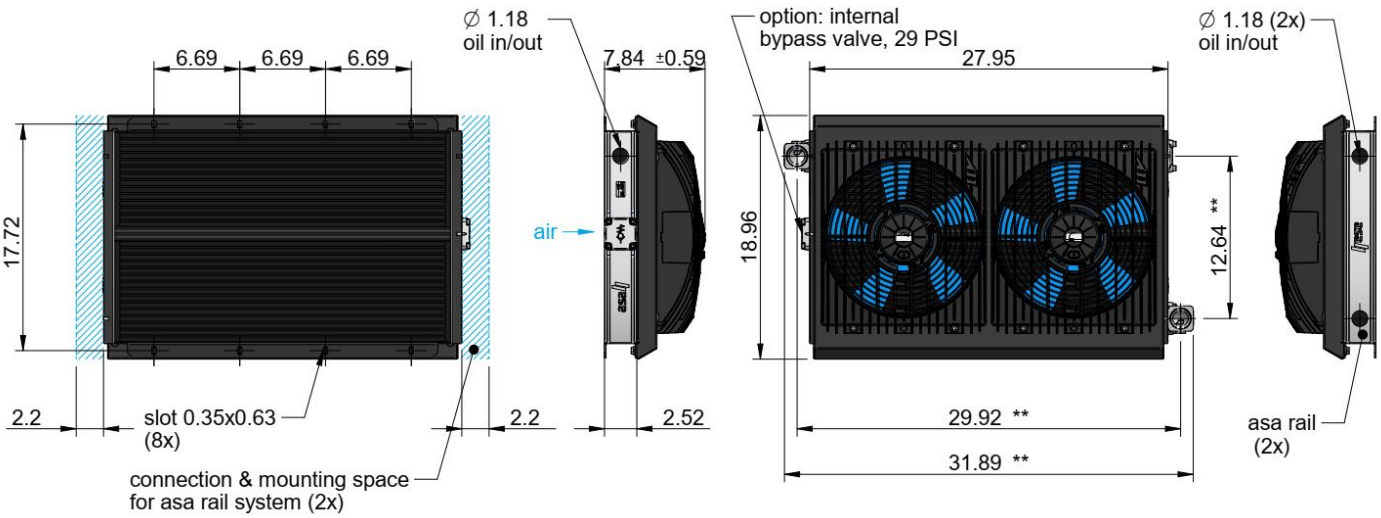
material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin shape:	wavy
working pressure:	370 PSI (static)

**...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.*

Options

asa rail connection UN 1 5/16"	ILLZSET5U16U00 (1 set per cooler)
asa rail connection UN 1 5/8"	ILLZSET5U20U00 (1 set per cooler)
temperature switches	ILLZTH5069KU00, ILLZTH6069KU00, ILLZTH9069KU00
temperature control	ILLZTC12-2KU00 or ILLZTC24-2KU00, except TT20 h.p.
internal bypass	alternative bypass settings (15 PSI/73 PSI)
internal temperature bypass	ILLZBPT5027KU00 (50°C)

Oil / Air Cooler
Standard Range TT 30 rail DC
12V / 24V DC



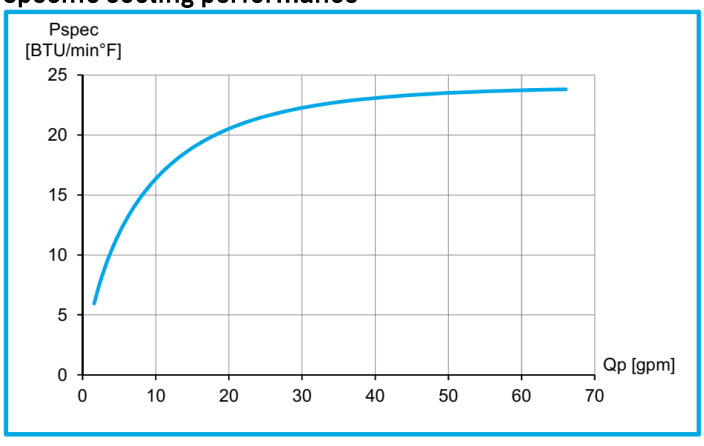
** ...installation example UN 1 5/8", connector set not included (ILLZSET5U20U00)

Technical Data

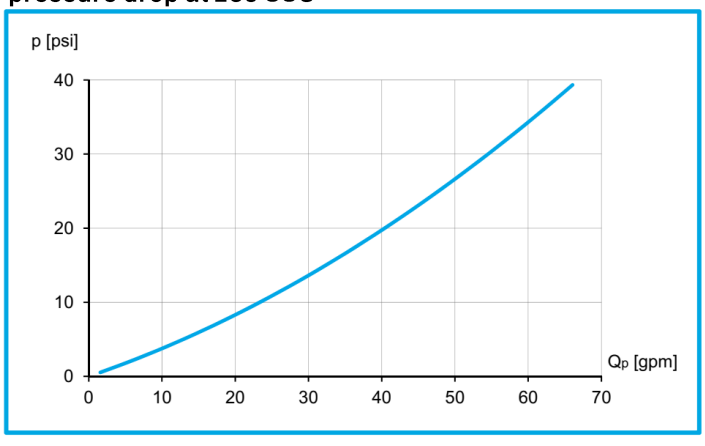
order number	description	power	current	protection	air flow	noise level	weight	optional internal bypass (29 PSI)
		[HP]	[A]		[CFM]	[dB(A)]	[lbs]	cooler order number
ASATT30RD03U00	TT 30 rail 12V DC HP	2x0.44	2x22.6	IP 68	2530	80	77.6	ASATT30RD03BPU00
ASATT30RD04U00	TT 30 rail 24V DC HP	2x0.46	2x11,4	IP 68	2530	80	80.7	ASATT30RD04BPU00

Performance

specific cooling performance



pressure drop at 150 SSU



Oil / Air Cooler
Standard Range TT 30 rail DC
12V / 24V DC

Radiator

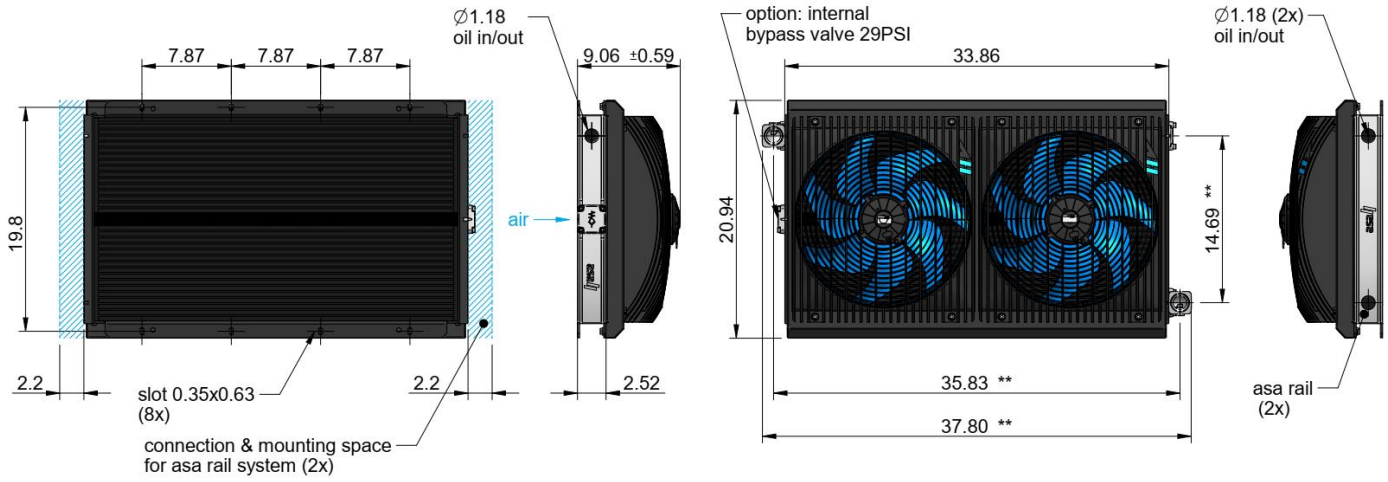
material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin:	wavy
working pressure:	377 PSI (static)

Options

asa rail connector set UN 1 5/16”	ILLZSET5U16U00 (requires 1 set/cooler)
asa rail connector set UN 1 5/8“	ILLZSET5U20U00 (requires 1 set/cooler)
asa rail connector set UN 1 5/16” HNBR asa rail connector set UN 1 5/8” HNBR	ILLZSET5U16HU00 ILLZSET5U20HU00 Connector set with suitable HNBR sealing for working temperature range up to 248°F (gear box cooling, water glycol cooling,...)
temperature switches	ILLZTH5069KU00, ILLZTH6069KU00, ILLZTH9069KU00
temperature control	variable fan speed control on request
internal bypass	alternative bypass settings (14.5 PSI / 72,5 PSI)
internal temperature bypass	ILLZBPT5027KU00 (122°F)

**...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.*

Oil / Air Cooler
Standard Range, TT 40 rail DC
12V / 24V DC



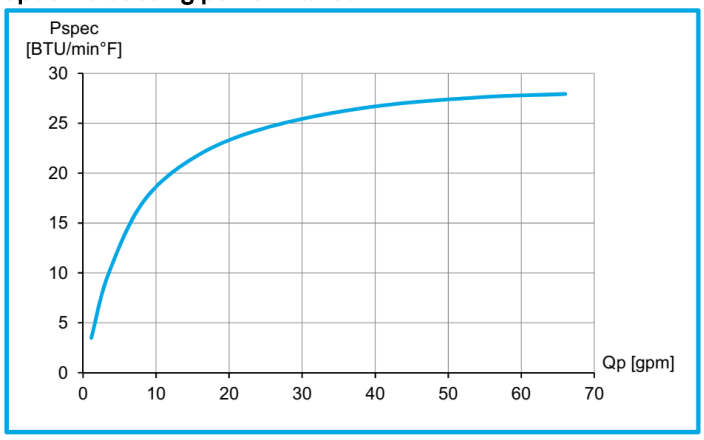
** ...installation example UN 1 5/8", connector set not included (ILLZSET5U20U00)

Technical Data

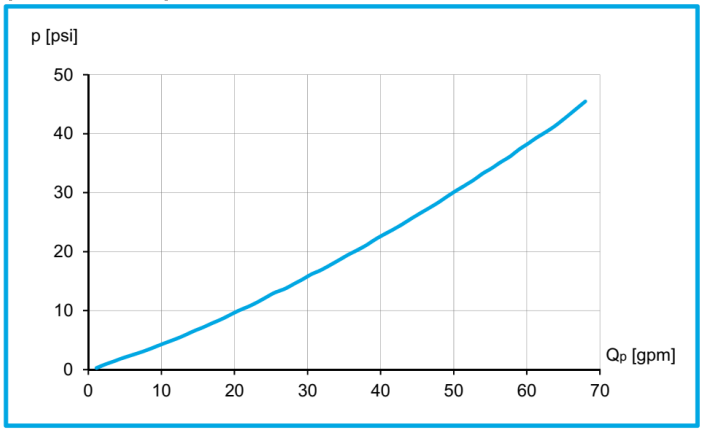
order number	description	power	current	protection	air flow	noise level	weight	optional internal bypass (29 PSI)
		[HP]	[A]		[SCFM]	[dB(A)]	[lbs]	cooler order number
ASATT40RD01U00	TT 40 rail 12V DC	2x0.38	2x21.2	IP 68	2750	78	71.2	ASATT40RD01BPU00
ASATT40RD02U00	TT 40 rail 24V DC	2x0.40	2x11.4	IP 68	2750	78	71.4	ASATT40RD02BPU00

Performance

specific cooling performance



pressure drop at 150 SSU



Oil / Air Cooler
Standard Range, TT 40 rail DC
12V / 24V DC

Radiator

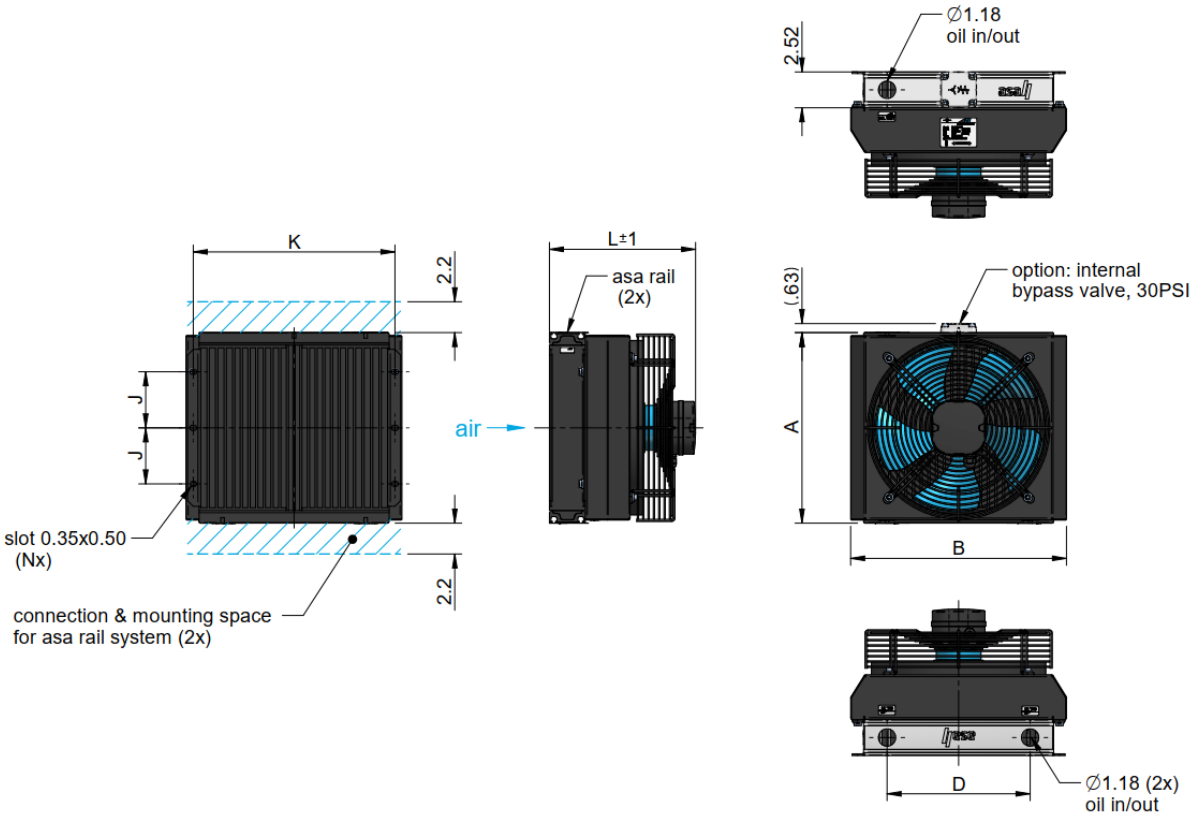
material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin:	wavy
working pressure:	377 PSI (static)

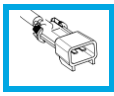
Pptions

asa rail connector set UN 1 5/16”	ILLZSET5U16U00 (requires 1 set/cooler)
asa rail connector set UN 1 5/8“	ILLZSET5U20U00 (requires 1 set/cooler)
asa rail connector set UN 1 5/16” HNBR asa rail connector set UN 1 5/8” HNBR	ILLZSET5U16HU00 ILLZSET5U20HU00 Connector set with suitable HNBR sealing for working temperature range up to 248°F (gear box cooling, water glycol cooling,...)
temperature switches	ILLZTH5069KU00, ILLZTH6069KU00, ILLZTH9069KU00
temperature control	variable fan speed control on request
internal bypass	alternative bypass settings (14.5 PSI / 72,5 PSI)
internal temperature bypass	ILLZBPT5027KU00 (122°F)

**...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.*

Oil / Air Cooler
Standard Range TT Rail Series COMPACT
115V 60Hz AC




fan motor connection: wires

Dimensions

order number	description	A	B	D	J	K	L	N	weight
		[in]	[in]	[in]	[in]	[in]	[in]		[lbs]
ASATT05RC2U00	TT 05 rail 115V/60Hz/2-pole compact	9.25	9.84	4.65	2.95	8.86	10.24	4	15.43
ASATT07RC2U00	TT 07 rail 115V/60Hz/2-pole compact	11.81	12.80	6.93	3.39	11.42	10.24	4	19.84
ASATT11RC4U00	TT 11 rail 115V/60Hz/4-pole compact	13.39	15.16	10.08	3.94	14.17	10.24	6	26.01
ASATT13RC4U00	TT 13 rail 115V/60Hz/4-pole compact	16.54	16.14	10.04	9.17	15.20	10.24	4	32.85
ASATT16RC4U00	TT 16 rail 115V/60Hz/4-pole compact	18.31	18.31	12.91	6.02	17.17	11.02	6	43.21

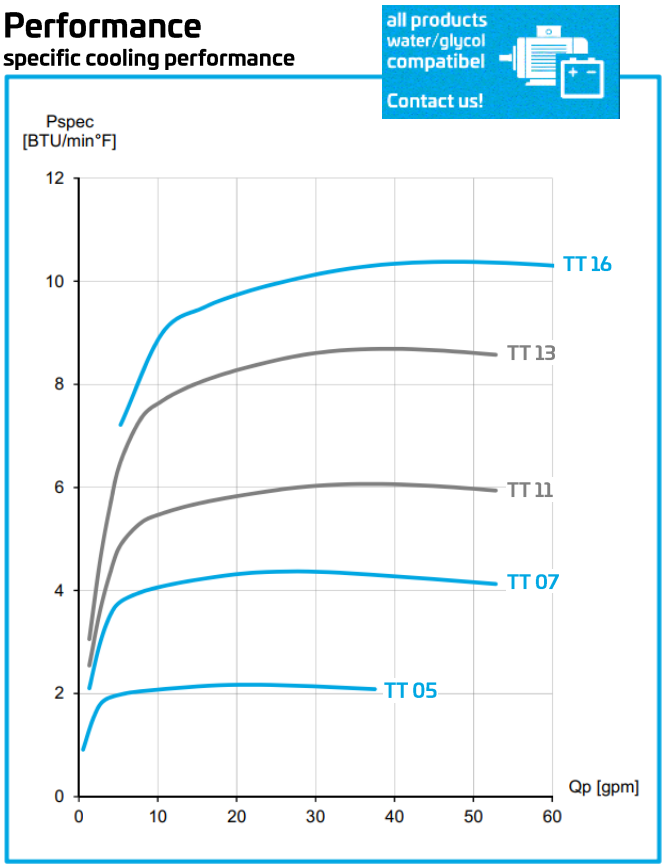
Technical Data

order number	description	motor power	current	protection	rotation	air flow	noise level	optional internal bypass (30PSI)
		[HP]	[A]		[rpm]	[CFM]	[db(A)]	cooler order number
ASATT05RC2U00	TT 05 rail 115V/60Hz/2-pole compact	0,09	0,65	IP 44	3000	326	67	ASATT05RC2BPU00
ASATT07RC2U00	TT 07 rail 115V/60Hz/2-pole compact	0,12	1.00	IP 44	3200	643	67	ASATT07RC2BPU00
ASATT11RC4U00	TT 11 rail 115V/60Hz/4-pole compact	0,16	0,92	IP 44	1600	927	59	ASATT11RC4BPU00
ASATT13RC4U00	TT 13 rail 115V/60Hz/4-pole compact	0,25	1,65	IP 44	1650	1294	64	ASATT13RC4BPU00
ASATT16RC4U00	TT 16 rail 115V/60Hz/4-pole compact	0,39	2,60	IP 54	1500	1542	66	ASATT16RC4BPU00

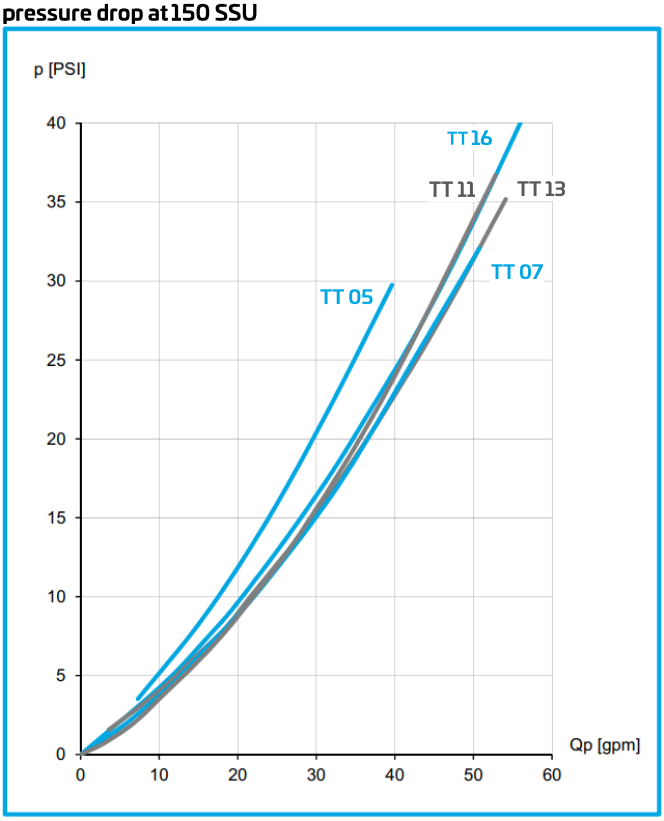
Oil / Air Cooler
Standard Range TT Rail Series COMPACT
115V 60Hz AC

Performance

specific cooling performance



pressure drop at 150 SSU



Radiator Style B

material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin shape:	wavy
working pressure:	370 PSI (static)

...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.

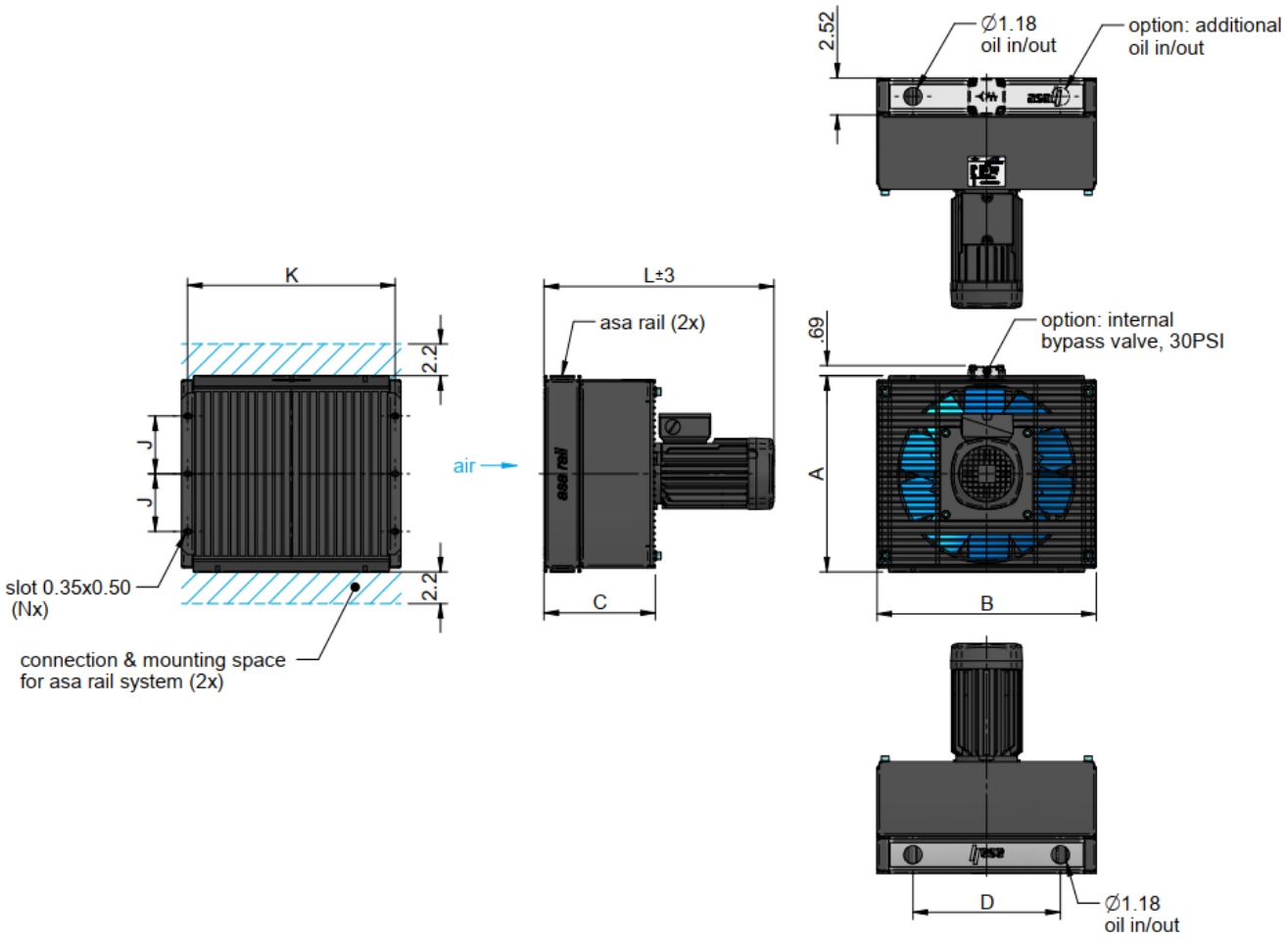
Options

230V, 50Hz	on request
230/460V 60Hz 3-phase	on request
temperature control	ILLZTCACKU00 (page 52)
temperature switches	ILLZTH4765KU00, ILLZTH6065KU00 (page 51)
rail mounting bracket	MW3046KU00
foot mounting options	ILLEFUSSTTKU00, ILLEFUSSTTHDKU00 (page 46)
internal bypass	alternative bypass settings (14.5 PSI / 72.5 PSI)

Installation System (see more information on page 42)

connection UN 1 $^{5}/_{16}$"	ILLZSET5U16U00 (1 set per cooler required)
connection UN 1 $^{5}/_{8}$"	ILLZSET5U20U00 (1 set per cooler required)

Oil / Air Cooler
Standard Range TT Rail Series
230/460V 60Hz AC



Dimensions

order number	description	A	B	C	D	J	K	L	N	weight
		[in]	[in]	[in]	[in]	[in]	[in]	[in]		[lbs]
ASATT07RA44U00	TT 07 rail 0.34HP AC	11.81	12.60	7.60	6.93	3.39	11.42	15.59	4	35.49
ASATT07RA25U00	TT 07 rail 0.75HP AC	11.81	12.60	7.60	6.93	3.39	11.42	15.59	4	37.48
ASATT11RA44U00	TT 11 rail 0.34HP AC	13.39	14.96	7.64	10.04	3.94	14.17	15.67	6	43.87
ASATT11RA27U00	TT 11 rail 1.50HP AC	13.39	14.96	7.64	10.04	3.94	14.17	15.67	6	46.08
ASATT16RA64U00	TT 16 rail 0.25HP AC	18.31	18.19	8.62	12.91	6.02	17.17	16.30	6	61.95
ASATT16RA45U00	TT 16 rail 0.50HP AC	18.31	18.19	8.62	12.91	6.02	17.17	16.30	6	60.41
ASATT16RA27U00	TT 16 rail 1.50HP AC	18.31	18.19	8.62	12.91	6.02	17.17	16.30	6	60.63
ASATT21RA66U00	TT 21 rail 0.50HP AC	23.82	21.97	8.62	12.91	8.21	17.17	17.32	6	89.95
ASATT21RA46U00	TT 21 rail 0.75HP AC	23.82	21.97	8.62	12.91	8.21	17.17	17.32	6	93.92
ASATT25RA66U00	TT 25 rail 0.50HP AC	23.82	21.97	8.62	16.61	8.21	20.87	17.32	6	90.83
ASATT25RA46U00	TT 25 rail 0.75HP AC	23.82	21.97	8.62	16.61	8.21	20.87	17.32	6	94.80
ASATT36RA66U00	TT 36 rail 0.50HP AC	23.82	28.98	9.41	23.46	8.21	28.00	18,92	6	89.7
ASATT36RA48U00	TT 36 rail 1.50HP AC	23.82	28.98	9.41	23.46	8.21	28.00	21,96	6	97.7
ASATT36RA4BU00	TT 36 rail 4.00HP AC	23.82	28.98	9.41	23.46	8.21	28.00	23,35	6	127.7

Oil / Air Cooler
Standard Range TT Rail Series
230/460V 60Hz AC

Technical Data

order number	description	motor power	current	protection level	rotation	air flow	noise level	optional internal bypass (30 PSI)
		[HP]	[A]		[rpm]	[CFM]	[db(A)]	cooler order number
ASATT07RA44U00	TT 07 rail 0.34HP AC	0.34	0.7	IP 55	1655	629	74	ASATT07RA44BPU00
ASATT07RA25U00	TT 07 rail 0.75HP AC	0.75	1.2	IP 55	3370	1320	89	ASATT07RA25BPU00
ASATT11RA44U00	TT 11 rail 0.34HP AC	0.34	0.7	IP 55	1655	1037	67	ASATT11RA44BPU00
ASATT11RA27U00	TT 11 rail 1.50HP AC	1.50	4.0	IP 55	3450	2202	87	ASATT11RA27BPU00
ASATT16RA64U00	TT 16 rail 0.25HP AC	0.25	0.6	IP 55	1120	1631	68	ASATT16RA64BPU00
ASATT16RA45U00	TT 16 rail 0.50HP AC	0.50	1.0	IP 55	1655	2450	77	ASATT16RA45BPU00
ASATT16RA27U00	TT 16 rail 1.50HP AC	1.50	4.0	IP 55	3450	3382	94	ASATT16RA27BPU00
ASATT21RA66U00	TT 21 rail 0.50HP AC	0.50	1.1	IP 55	1105	2576	71	ASATT21RA66BPU00
ASATT21RA46U00	TT 21 rail 0.75HP AC	0.75	1.4	IP 55	1680	3455	83	ASATT21RA46BPU00
ASATT25RA66U00	TT 25 rail 0.50HP AC	0.50	1.1	IP 55	1105	2782	71	ASATT25RA66BPU00
ASATT25RA46U00	TT 25 rail 0.75HP AC	0.75	1.4	IP 55	1745	3786	83	ASATT25RA46BPU00
ASATT36RA66U00	TT 36 rail 0.50HP AC	0.50	1.1	IP 55	1105	3097	77	ASATT36RA66BPU00
ASATT36RA48U00	TT 36 rail 1.50HP AC	1.50	2.1	IP 55	1720	4853	86	ASATT36RA48BPU00
ASATT36RA4BU00	TT 36 rail 4.00HP AC	4.00	5.5	IP 55	1730	7024	83	ASATT36RA4BBPU00

Radiator Style B

material:	aluminum
working temperature	-4°F to +176°F (oil temperature)*
air fin shape:	wavy
working pressure:	370 PSI (static)

**...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.*

Installation System (see more information on page 42)

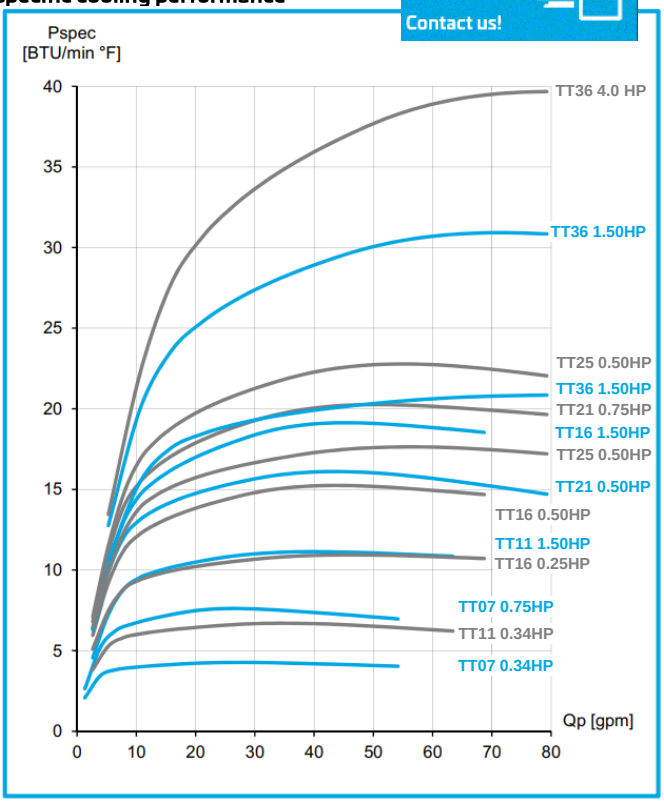
connection UN 1 $^{5}/_{16}$"	ILLZSET5U16U00 (1 set per cooler)
connection UN 1 $^{5}/_{8}$"	ILLZSET5U20U00 (1 set per cooler)

Oil / Air Cooler
Standard Range TT Rail Series
230/460V 60Hz AC

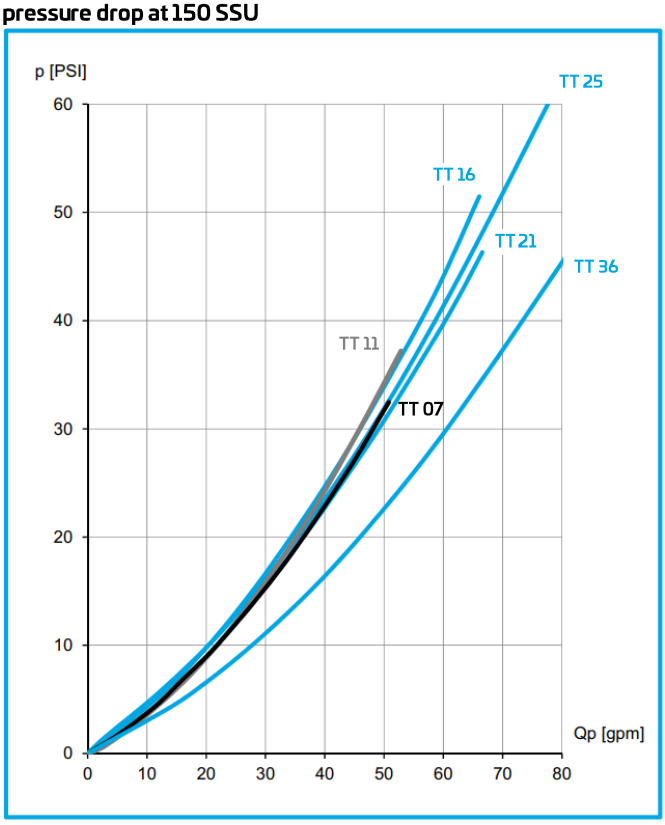
Performance

all products water/glycol compatibel
Contact us!

specific cooling performance



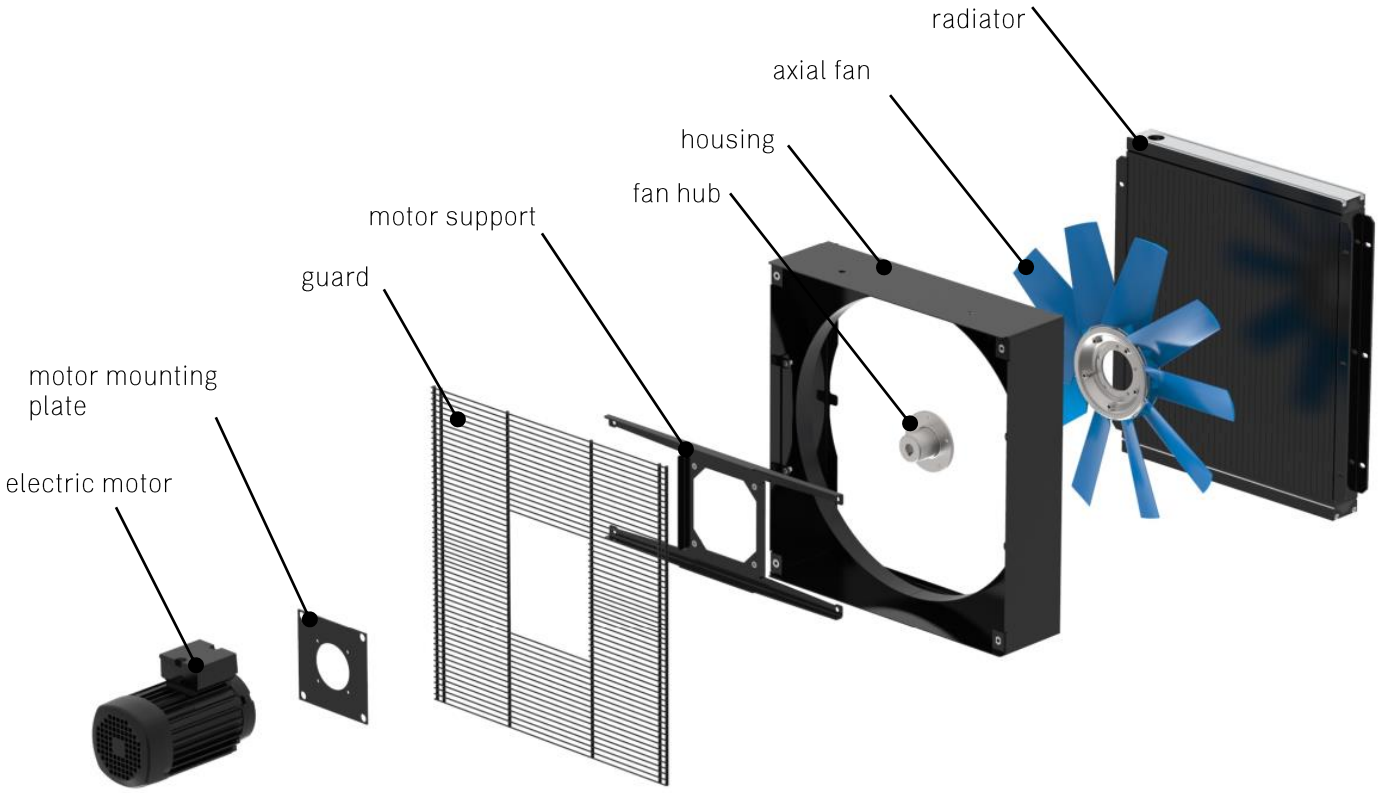
pressure drop at 150 SSU



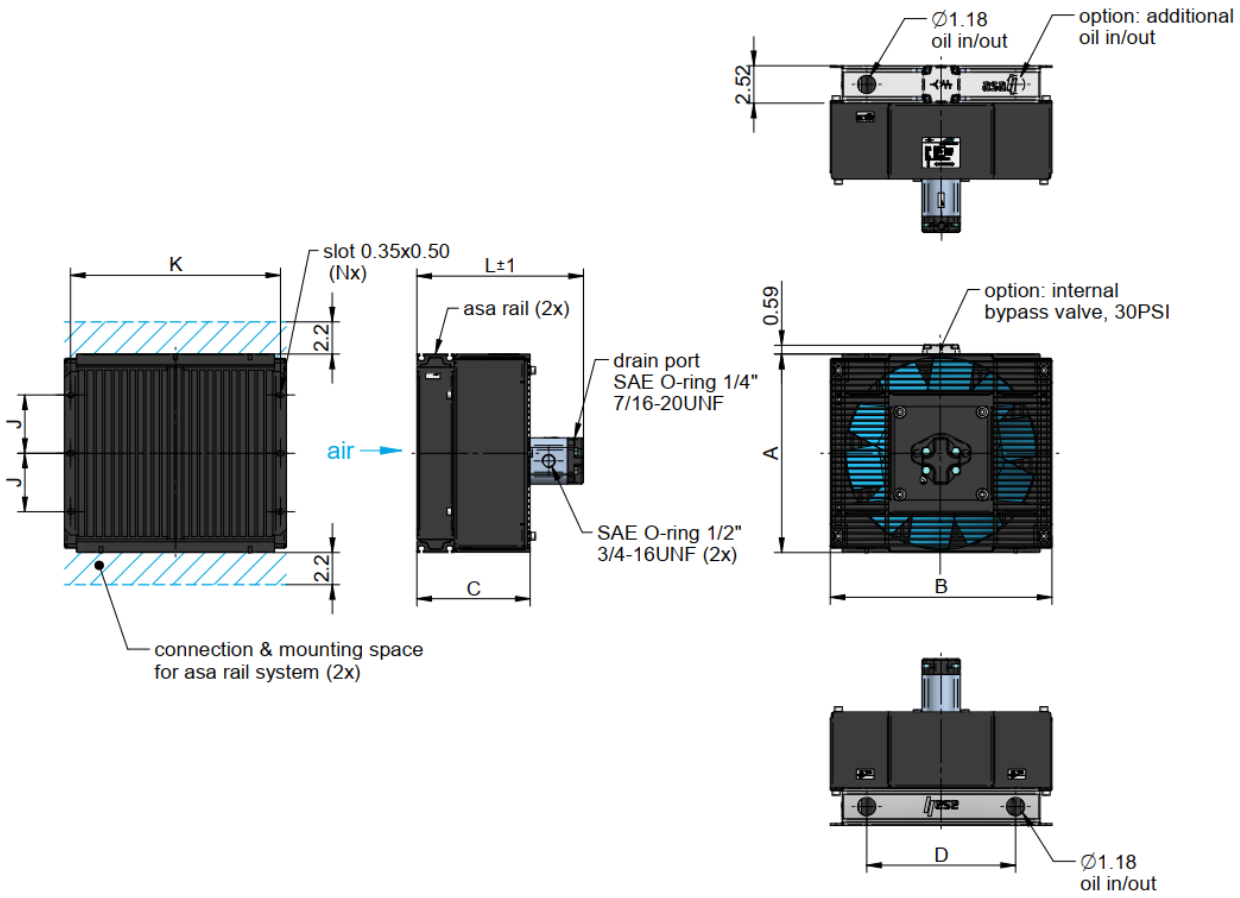
Oil / Air Cooler
Standard Range TT Rail Series
230/460V 60Hz AC

Options

motor data	alternative voltages, frequencies, IP classes, etc on request
temperature control	ILLZTCACKU00 (page 52)
temperature switches	ILLZTH4765KU00, ILLZTH6065KU00 (page 51)
rail mounting bracket	MW3046KU00
foot mounting options	ILLEFUSSTTKU00, ILLEFUSSTTHDKU00 (page 46)
internal bypass	alternative bypass settings (14.5 PSI / 72.5 PSI)



Oil / Air Cooler
Standard Range TT Rail Series
with 0.73in³and 0.67 in³ hydraulic drive



Dimensions

order number	description	A	B	C	D	J	K	L	N	weight
		[in]	[in]	[in]	[in]	[in]	[in]	[in]		[lbs]
ASATT11RH11U03	TT 11 rail 0.67 in³ hydr.motor	13.39	14.96	7.64	10.04	3.94	14.17	10.87	6	37.48
ASATT16RH11U03	TT 16 rail 0.67 in³ hydr.motor	18.31	18.19	8.62	12.91	6.02	17.17	11.50	6	54.01
ASATT25RH11U03	TT 25 rail 0.67 in³ hydr.motor	23.82	21.97	8.62	16.61	8.21	20.87	11.50	6	71.65
ASATT36RH11U03	TT 36 rail 0.67 in³ hydr.motor	23.82	28.98	9.41	23.46	8.21	28.00	14.45	6	96.30

Oil / Air Cooler
Standard Range TT Rail Series
with 0.67 in³ hydraulic drive

Technical Data

order number	description	motor power	oil pressure	oil flow	rotation	air flow	noise level	optional internal bypass (30PSI)
		[HP]	[PSI]	[gpm]	[rpm]	[CFM]	[dB(A)]	cooler order number
ASATT11RH11U03	TT 11 rail 0.67 in³ hydr.motor	0.03	17	3.3	1000	625	53	ASATT11RH12BPU00
		0.23	66	6.7	2000	1259	72	
		0.78	149	10.0	3000	1913	82	
ASATT16RH11U03	TT 16 rail 0.67 in³ hydr.motor	0.11	63	3.3	1000	1448	66	ASATT16RH12BPU00
		0.87	249	6.7	2000	2998	81	
		2.93	560	10.0	3000	4527	90	
ASATT25RH11U03	TT 25 rail 0.67 in³ hydr.motor	0.19	109	3.3	1000	2510	69	ASATT25RH12BPU00
		1.55	444	6.7	2000	5145	84	
		5.25	1003	10.0	3000	7752	93	
ASATT36RH11U03	TT 36 rail 0.67 in³ hydr.motor	0.50	312	3.1	1000	4099	71	ASATT36RH11BPU00
		1.71	712	4.6	1500	6249	86	
		4.06	1267	6.1	2000	8416	95	

Radiator Style B

material:	aluminum
working temperature range:	-4°F to +176°F (oil temperature)*
air fin shape:	wavy
working pressure:	370 PSI (static)

...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.

Installation System (see more information on page 42)

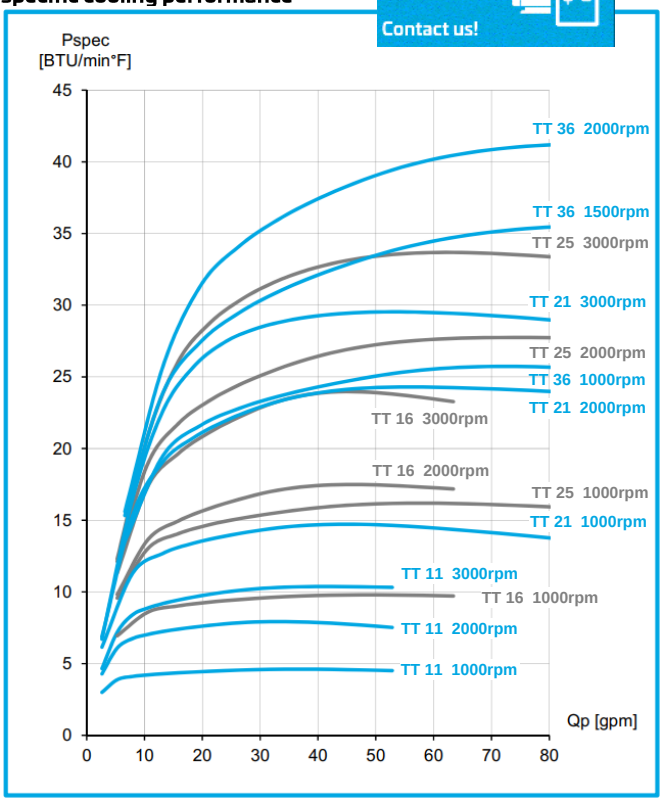
connection UN 1 5/16"	ILLZSET5U16U00 (1 set per cooler required)
connection UN 1 5/8"	ILLZSET5U20U00 (1 set per cooler required)

Oil / Air Cooler
Standard Range TT Rail Series
with 0.67 in³ hydraulic drive

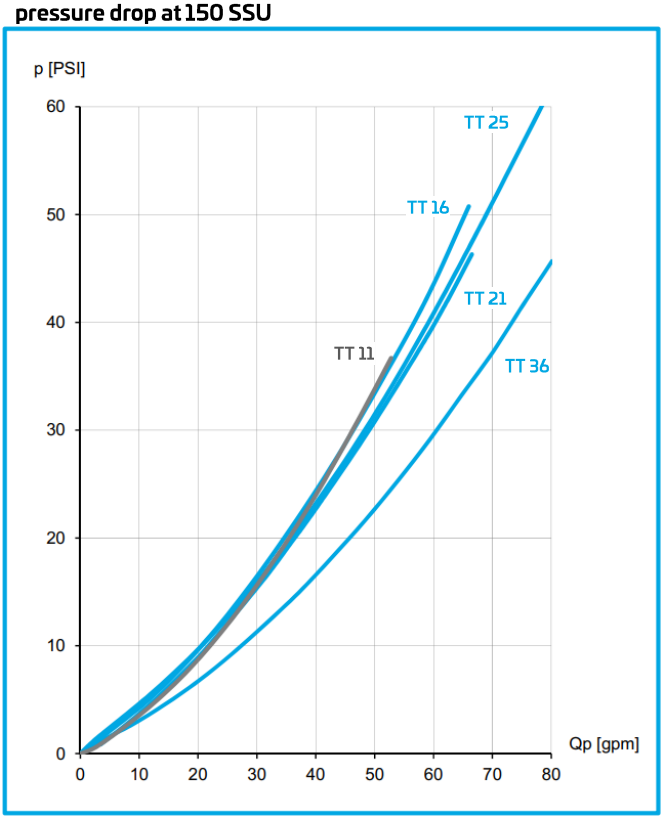
Performance

specific cooling performance

all products water/glycol compatibel
Contact us!



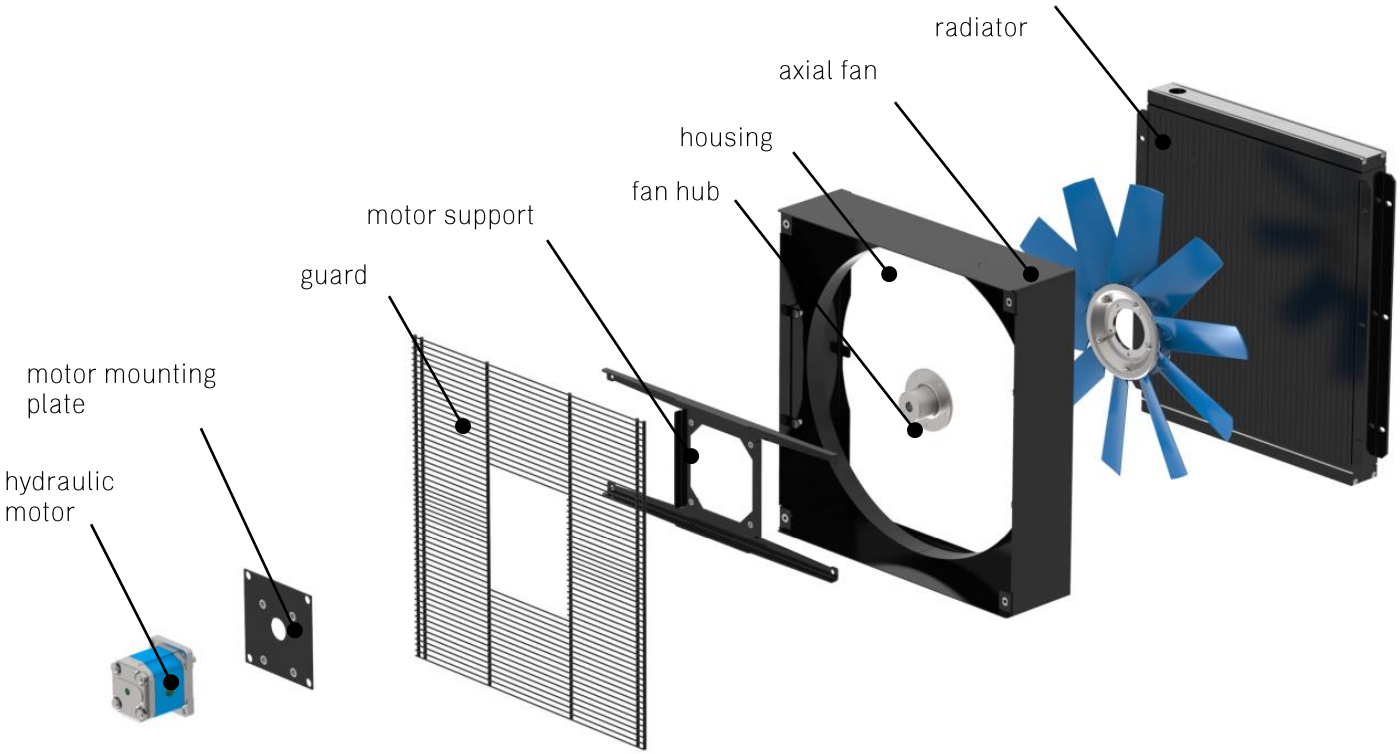
pressure drop at 150 SSU



Oil / Air Cooler
Standard Range TT Rail Series
with 0.67 in³ hydraulic drive

Options

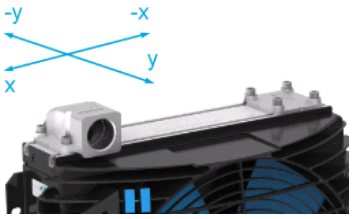
hydraulic motor	alternative displacements on request
temperature switches	ILLZTH5069KU00, ILLZTH6069KU00, ILLZTH9069KU00 (page 51)
rail mounting bracket	MW3046KU00
foot mounting options	ILLEFUSSTTK, ILLEFUSSTTHDKU00 (page 46)
internal bypass	alternative bypass settings (14.5 PSI / 72.5 PSI)



Connector TT rail Series

Description

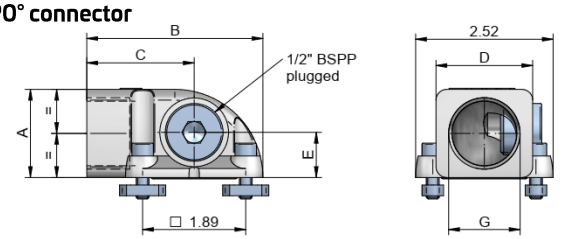
The asa rail system is the first worldwide flexible mounting and connection system for air blast heat exchangers. The flexibility comes from free choice of the port's direction. Each port on the radiator has 3 mounting possibilities. This well designed radiator concept brings another flexibility innovation hit to the standard cooler market: The oil flow direction can be chosen between u-flow direction and diagonal oil flow on each TT rail cooler!



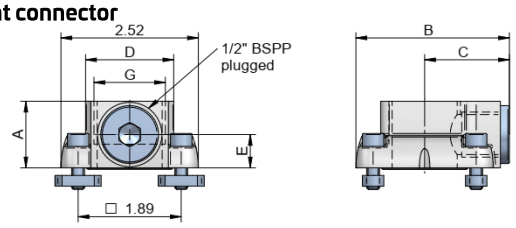
The radiator rail slots are not only for connecting the hydraulic ports, it is also possible to have the system attached with e.g.: bypass systems, mounting of the cooler to an aggregate, measurement devices, and much more. Please contact us to discover the huge potential of this rail system for your application.

Dimensions

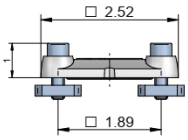
ported 90° connector

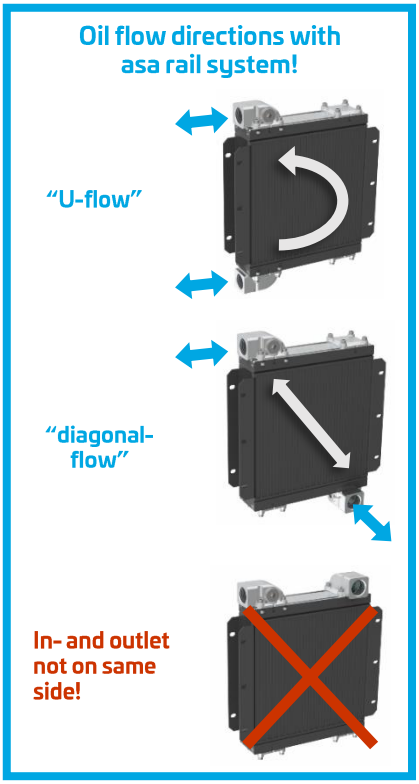


ported straight connector



blind connector



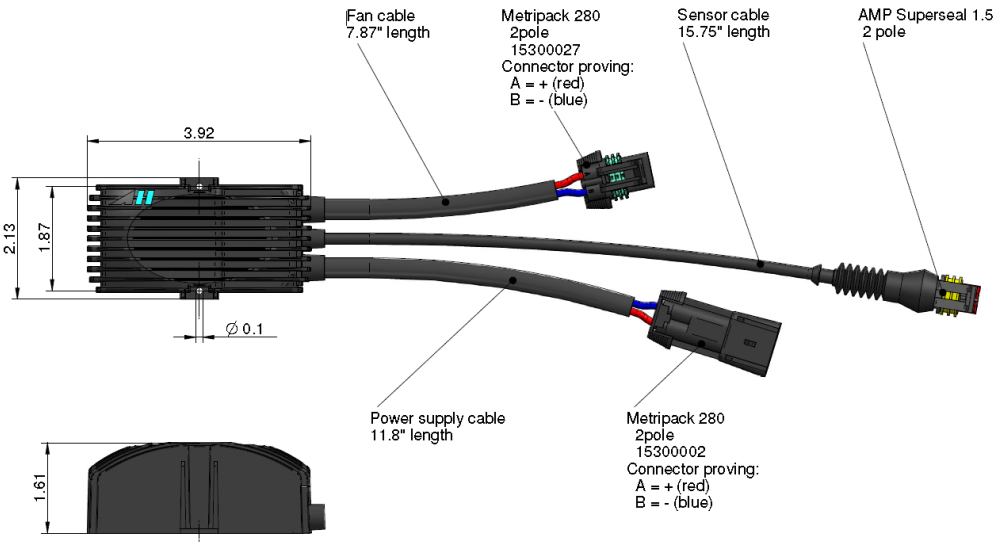


Technical Data with NBR-sealing

order number	description	thread size
ILLZSET5U12U00	asa rail connector set 2x 90° SAE -12 ORB	UNF 1 1/16
ILLZSET5U16U00	asa rail connector set 2x 90° SAE -16 ORB	UNF 1 5/16
ILLZSET5U20U00	asa rail connector set 2x 90° SAE -20 ORB	UNF 1 5/8
ILLZSET5U12AU00	asa rail connector set 2x straight SAE -12 ORB	UNF 1 1/16
ILLZSET5U16AU00	asa rail connector set 2x straight SAE -16 ORB	UNF 1 5/16
ILLZSET5U20AU00	asa rail connector set 2x straight SAE -20 ORB	UNF 1 5/8
ILLZSET5U12BU00	asa rail connector set 1x 90° 1x straight SAE -12 ORB	UNF 1 1/16
ILLZSET5U16BU00	asa rail connector set 1x 90° 1x straight SAE -16 ORB	UNF 1 5/16
ILLZSET5U20BU00	asa rail connector set 1x 90° 1x straight SAE -20 ORB	UNF 1 5/8
ILLZSET5032U00	intermediate flange TT rail NG 32 kit	
Reach out for BSP		

Temperature Control
12V/24V DC

This system consists of a temperature sensor (ILLZTT5069K) and a control unit (12V or 24V available). The fan speed varies according to the actual oil temperature on the sensor. This reduces the noise level of the cooler system and increases the durability of the fan motor, because it is not running on the maximum speed all the time. The start up temperature of this system is 111°F and the maximum rotation of the fan is applied when the oil temperature reaches 131°F. The electro-magnetic compatibility (EMC) is tested according to CE (89/336/EC) and E (95/54/EC). Moreover the control unit (ILLZTC12-2K and ILLZTC24-2K) can also be connected with our temperature switches (IP69K switch type). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.



- energy saving
- reduced noise level
- EMC compatibility
- IP 69K protection to sensor/switch

Technical Data

order number	description	max. power fan motor	max. current fan	protection	weight	supply
		[W]	[A]		[lbs]	DC
ILLZTC12-2KU00	temperature control 12V DC	310	23 (12V DC)	IP 67	0,55	12V (9V – 15V)
ILLZTC24-2KU00	temperature control 24V DC	340	12 (24V DC)	IP 67	0,55	24V (18V – 32V)

Characteristics

material:	polyamide
mounting instructions	any mounting position

Measurement input

temperature sensor	ILLZTT5069KU00 (control range 111-131°F)
temperature switch	ILLZTH5069KU00 (set point 122°F, soft start)
	ILLZTH6069KU00 (set point 140°F, soft start)
	ILLZTH9069KU00 (set point 194°F, soft start)

Ambient Conditions

ambient temperature range	-4°F to +185°F
storage temperature range	-76°F to +230°F

Combinations

12V and 24V DC coolers	LL 03L,LL 04, LL 06, LL08, LL14 / TT 05 - 40 rail (except TT21 h.p), ASA 0177 - 0367

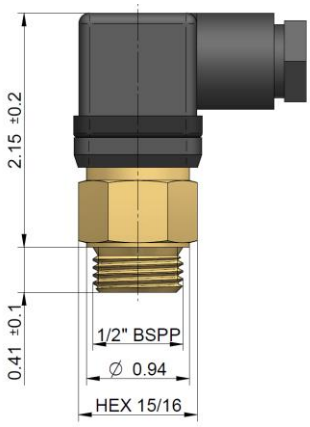
Please note:
The maximum start current is approximately 10% higher than the nominal current of the motor. Observe the maximum allowable supply of the fan motor. The allowed voltage range of the fan might differ from the allowed voltage range of the temperature control. In case of inverse polarity of the supply, the control unit is deactivated. After changing the polarity, the control is ready for use again. If the supply voltage exceeds 16,5V (ILLZTC12-2KU00) and 32V (ILLZTC24-2KU00) respectively, the control is switched off to protect the fan. After supply voltage is reducing below 12V or 24V, respectively, the control is activated again, automatically. The closed current is 5mA (ILLZTC12-2KU00) and 4mA (ILLZTC24-2KU00), respectively. The recommended fuse is fast acting 25A (ILLZTC12-2KU00) and 16A (ILLZTC24-2KU00), respectively. Due to the high currents (21A at the ILLZTC12-2KU00), the dimension of the electrical wires must be appropriate and in case of a luster terminal it has to be tightened properly.

Temperature Control
12V/24V DC

Installation scheme

Thermal Systems
Accessories
Temperature switches 122°F, 140°F, IP65

According to the cooler type and size, our temperature switches fit on all coolers and connectors with ½“BSPP threads. On request we offer various other bi-metal temperature switches with different temperature settings, protection classes and connection makes.



Technical Data

order number	description	connection	protection	switch temperature	difference	weight
				[°F]	[°F]	[lbs]
ILLZTH4765KU00	temperature switch 122°F	3-pole connection	IP 65	122 ± 9	18 ± 9	0.20
ILLZTH6065KU00	temperature switch 140°F	3-pole connection	IP 65	122 ± 9	18 ± 9	0.20

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	40Nm
number of cycles	100.000
counter connector	included

Ambient Conditions

oil temperature range	-4°F to +212°F
ambient temperature range	-4°F to +176°F
storage temperature range	-76°F to +230°F

Combinations

all coolers and connectors with ½“BSPP threads

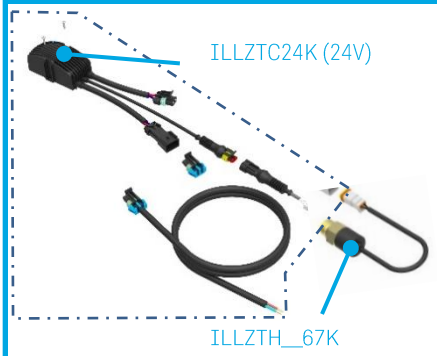
Measurement Output

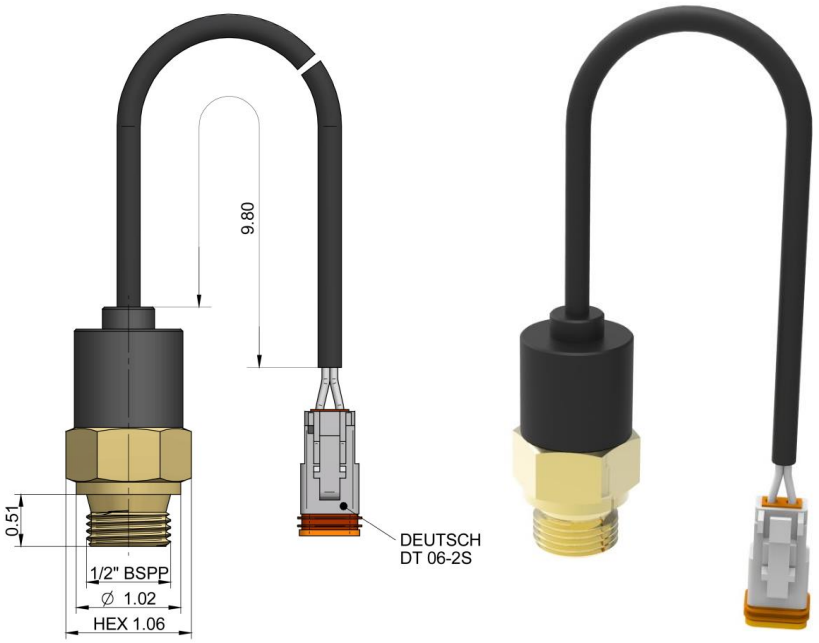
contact	N.O. (normal open)
maximum current	12V AC: 10 (4)A
	24V AC: 10 (3)A
	125V AC: 12 (2)A
	250V AC: 10 (1)A
Use power relay for switching!	

Thermal Systems
Accessories
Temperature switches 122°F / 158°F / 194°F, IP67

According to the cooler type and size, our temperature switches fit on all coolers and connectors with ½" BSPP threads. Please contact us for the compatibility of the products. IP67 switch types like the ILLZTH9067KU00 work in combination with our temperature control units ILLZTC12KU00 (12V) or ILLZTC24KU00 (24V), respectively. This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the lifetime of the fan motor.

Connection Example





Technical Data

order number	description	connection	protection	switch temperature	differential	weight
				[°F]	[°F]	[lbs]
ILLZTH4767KU00	Temp. switch 122°F, IP 67, Kit	Deutsch DT 06-2S	IP 67	122 ± 9	18 ± 9	0.31
ILLZTH7067KU00	Temp. switch 158°F, IP 67, Kit	Deutsch DT 06-2S	IP 67	158 ± 9	18 ± 9	0.31
ILLZTH9067KU00	Temp. switch 194°F, IP 67, Kit	Deutsch DT 06-2S	IP 67	194 ± 9	18 ± 9	0.31

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	50Nm
number of cycles	100.000
counter connector	included
aluminium sealing washer	included

Electric Characteristics

contact	N.O. (normal open)
maximum current	12V AC: 10A
	24V AC: 10A
	120V AC: 15A
	230V AC: 10A
Use power relay for switching!	

Compatibility

all coolers and connectors with ½" BSPP threads

Ambient Conditions

oil temperature range	-4°F to +212°F
ambient temperature range	-4°F to +176°F
storage temperature range	-76°F to +230°F

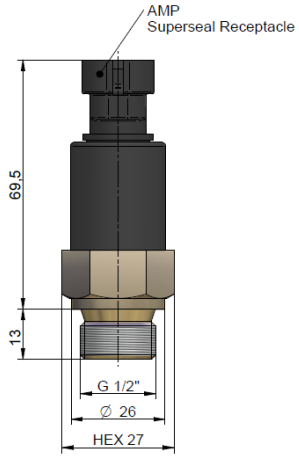
Thermal Systems Accessories

Temperature switches 122°F, 140°F, 194°F, IP69K

According to the cooler type and size, our temperature switches fit on all coolers and connectors with ½“BSPP threads. Please contact us for the compatibility of the products. IP69K switch types work in combination with our temperature control units ILLZTC12-2KU00 (12V) and also with ILLZTC24-2KU00 (24V). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.

On request we offer various other bi-metal temperature switches with different temperature settings, protection classes and connection makes.

Protection IP69k



Temperature Control

Technical Data

order number	description	connection	protection	switch temperature	difference	weight
				[°F]	[°F]	[lbs]
ILLZTH5069KU00	temperature switch 122°F	AMP superseal 1,5	IP 69K	122 ± 9	18 ± 9	0.22
ILLZTH6069KU00	temperature switch 140°F	AMP superseal 1,5	IP 69K	140 ± 9	18 ± 9	0.22
ILLZTH9069KU00	temperature switch 194°F	AMP superseal 1,5	IP 69K	194 ± 9	18 ± 9	0.22

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	40Nm
number of cycles	100.000
counter connector	included

Ambient Conditions

oil temperature range	-4°F to +212°F
ambient temperature range	-4°F to +176°F
storage temperature range	-76°C to +230°F

Combinations

all coolers and connectors with ½“BSPP threads

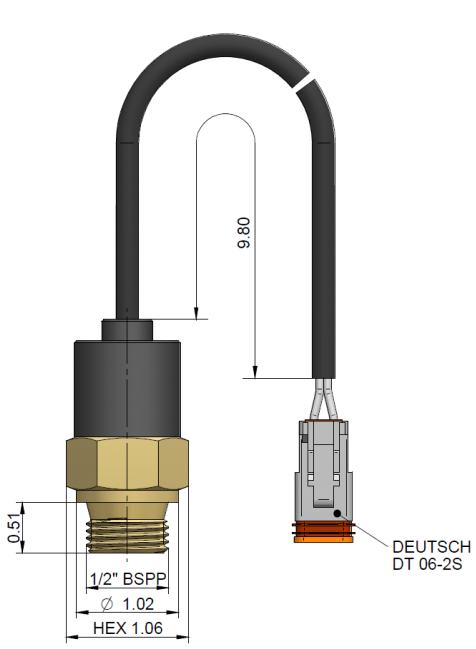
Measurement Output

contact	N.O. (normal open)
maximum current	12V AC: 10 (4)A
	24V AC: 10 (3)A
	125V AC: 12 (2)A
	250V AC: 10 (1)A
Use power relay for switching!	

Thermal Systems
Accessories
Temperature Switch 158°F / IP67

According to the cooler type and size, our temperature switches fit on all coolers and connectors with BSP ½“ threads. Please contact us for the compatibility of the products. IP67 switch types ILLZTH7067K work in combination with our temperature control units also with ILLZTC24-2K (24V). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.

Temperaturschalter



Technische Daten

order number	description	connection	protection	switch	difference	weight
				[°F]	[°F]	[lbs]
ILLZTH7067KU00	Temperature switch 158°F	Deutsch DT 06-2S	IP 67	158 ± 9	18 ± 9	0,22

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	36.8 lb_f ft
number of cycles	100,000
counter connector	included
sealing washer	included

Electric Characteristics

contact	N.O. (normal open)
maximum current	12V AC: 10A
	24V AC: 10A
	120V AC: 12A
	230V AC: 10A
Use power relay for switching!	

Ambient Conditions

oil temperature range	-22°F to +212°F
ambient temperature range	-22°F to +185°F
storage temperature range	-140°F to 230°F

Combinations

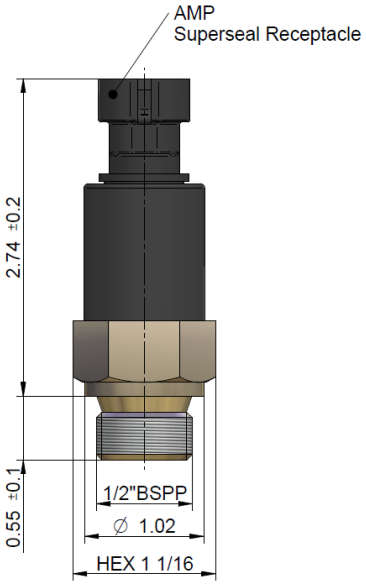
all coolers and connectors with BSP ½“ threads

Thermal Systems
Accessories
Temperature switches 158°F, IP68K

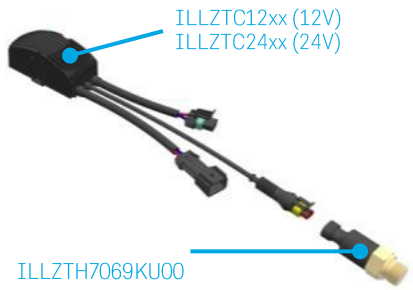
According to the cooler type and size, our temperature switches fit on all coolers and connectors with BSPP ½“ threads. Please contact us for the compatibility of the products. IP69K switch type work in combination with our temperature control units ILLZTC12xx(12V) and also with ILLZTC24xx(24V). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.

On request we offer various other bi-metal temperature switches with different temperature settings, protection classes and connection makes.

Protection IP69k



Temperature Control



Technical Data

order number	description	connection	protection	switch temperature	difference	weight
				[°F]	[°F]	[lbs]
ILLZTH7069KU00	temperature switch 158 °F	AMP superseal 1,5	IP 69K	158 ± 9	18 ± 9	0,22

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	40Nm
number of cycles	100.000
counter connector	included

Ambient Conditions

oil temperature range	-4°F to +212°F
ambient temperature range	-4°F to +176°F
storage temperature range	-76°F to 230°F

Combinations

all coolers and connectors with BSP ½“ threads

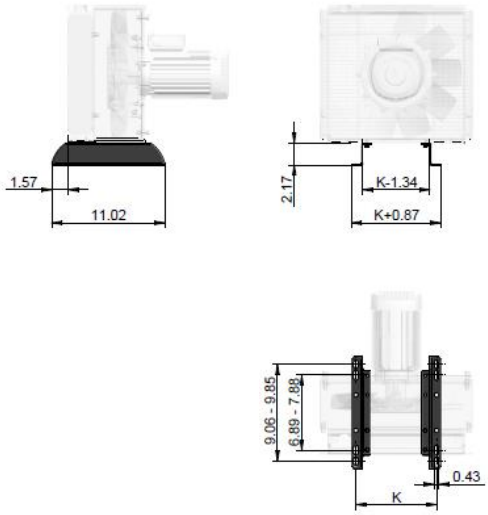
Electrical characteristics

contact	N.O. (normal open)
maximum current	12V AC: 10 (4)A
	24V AC: 10 (3)A
	120V AC: 12 (2)A
	230V AC: 10 (1)A
Use power relay for switching!	

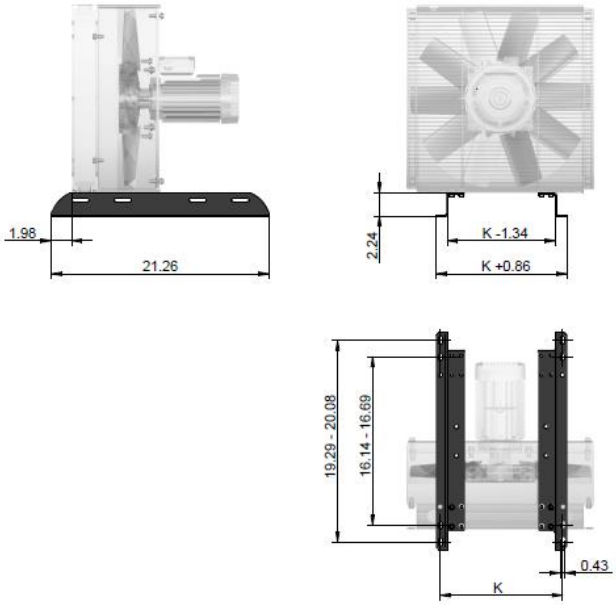
Thermal Systems / Accessories
Foot Mounting for asa rail system coolers

The foot mounting option is available for rail system coolers. The heavy duty design option is recommended for use on mobile machines and vehicles or other heavy duty applications with higher requirements regarding corrosion and mechanical stress. 1 set consists of 2 foot brackets with mounting material.

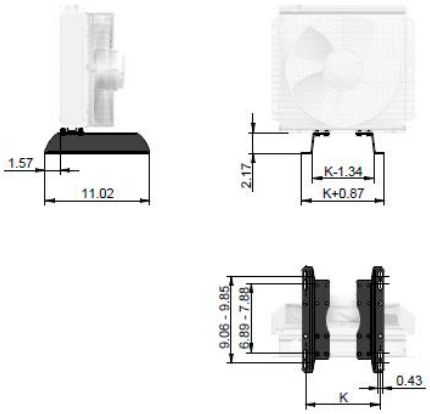
ILLEFUSSTTK



ILLEFUSSTTLK



ILLEFUSSTTHDK



standard mounting set			heavy duty mounting set			long version mounting set		
cooler	K_{min}	K_{max}	cooler	K_{min}	K_{max}	cooler	K_{min}	K_{max}
	[in]	[in]		[in]	[in]		[in]	[in]
TT 07	3.94	5,31	TT 07	5.31	5.71	TT 07	5.31	5.31
TT 11	3.94	8.46	TT 11	5.31	8.66	TT 11	5.31	8.46
TT 13	3.94	8.46	TT 13	5.31	8.66	TT 13	5.31	8.46
TT 16	3.94	11.42	TT 16	5.31	11.81	TT 16	5.31	11.42
TT 21	3.94	11.42	TT 21	5.31	11.81	TT 21	5.31	11.42
TT 25	3.94	14.96	TT 25	5.31	15.55	TT 25	5.31	15.16
TT 36	-	-	TT 36	5.31	22.05	TT 36	5.31	21.65

order number	description	fits on cooler type								weight
		TT 05	TT 07	TT 11	TT13	TT 16	TT 21	TT 25	TT36	[lbs]
ILLEFUSSTTUK00	mounting feet set TT 07 – 25	-	●	●	●	●	●	●	–	2.7
ILLEFUSSTTHDKU00	mounting feet set TT 07 – 36 (heavy duty)	-	●	●	●	●	●	●	●	3.7
ILLEFUSSTTLKU00	mounting feet TT rail, long version	-	●	●	●	●	●	●	●	6.0

Characteristics

bracket material	steel

Corrosion Protection

ILLEFUSSTTK	comparable to C3 short (ISO 12944), Ri3 (ISO 4628-3)
ILLEFUSSTTHDK	comparable to C5-M short (ISO 12944), Ri3 (ISO 4628-3)
ILLEFUSSTTLK	comparable to C3 short (ISO 12944) Ri3 (ISO 4628-3)

Delivery Content

foot mounting bracket	2x
mounting material	included