

# Thermal Systems OFFLINE Coolers / Air Cooled Range CC-2 Rail 35-102 lpm



## OFFLINE Coolers Air Cooled Range / CC-2 Rail / 35-102 Ipm

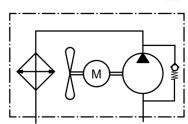


#### **General Data and Details**

The oil / air coolers of our CC series are autonomous cooling systems with an integrated circulation pump. They work as a separate cooling unit or as a filter cooling unit with an adequate filter. The benefits of such circulation coolers are a constant cooling performance and a higher durability, because there are no pressure vibrations or peaks in the cooler unit.

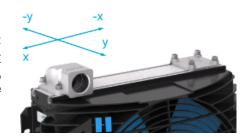
#### Conditions of use:

Maximum oil temperature: 80°C, maximum air temperature: 50°C. Motors can be used up to an altitude of 1.500m. For other conditions of use please contact our engineers.

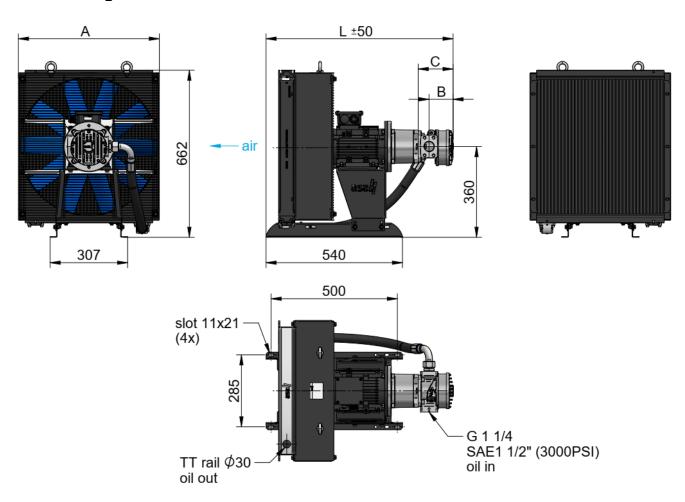


#### Connection

The *asa* rail system is the first worldwide flexible mounting and connection system for air blast heat exchangers. It gives you the free choice of the connector direction through turnable ports. The rail slots in the radiator are the frame structure not only for connecting the ports, also for various possible mounting arrangements such as bypass systems, mounting of the cooler to aggregates, measurement devices and much more. Please contact us to discover the huge potential of this system for your application.



#### **Scale Drawing**



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#### **Dimensions**

order number	description	А	В	С	L	weight
		[mm]	[mm]	[mm]	[mm]	[kg]
ASATT21RA6AC4	TT 21 rail 230/400V 1,50kW 6-pol 40cc	558	85	128	760	73
ASATT25RA69C4	TT 25 rail 230/400V 1,10kW 6-pol 40cc	558	85	128	731	63
ASATT25RA69C8	TT 25 rail 230/400V 1,10kW 6-pol 80cc	558	107	150	753	65
ASATT36RA69C8	TT 36 rail 230/400V 1,10kW 6-pol 80cc	736	107	150	774	75
ASATT36RA69C6	TT 36 rail 230/400V 1,10kW 6-pol 60cc	736	96	139	763	73
ASATT36RA6AC8	TT 36 rail 230/400V 1,50kW 6-pol 80cc	736	107	150	803	86
ASATT25RA49C4	TT 25 rail 230/400V 1,50kW 4-pol 40cc	558	85	128	731	64
ASATT25RA49C6	TT 25 rail 230/400V 1,50kW 4-pol 60cc	558	96	139	742	65
ASATT25RA4AC8	TT 25 rail 230/400V 2,20kW 4-pol 80cc	558	107	150	782	73
ASATT36RA49C6	TT 36 rail 230/400V 1,50kW 4-pol 60cc	736	96	139	763	75
ASATT36RA4AC8	TT 36 rail 230/400V 2,20kW 4-pol 80cc	736	107	150	803	81
ASATT36RA4BC6	TT 36 rail 230/400V 3,00kW 4-pol 60cc	736	96	139	792	86
ASATT36RA4BC8	TT 36 rail 230/400V 3,00kW 4-pol 80cc	736	107	150	803	87



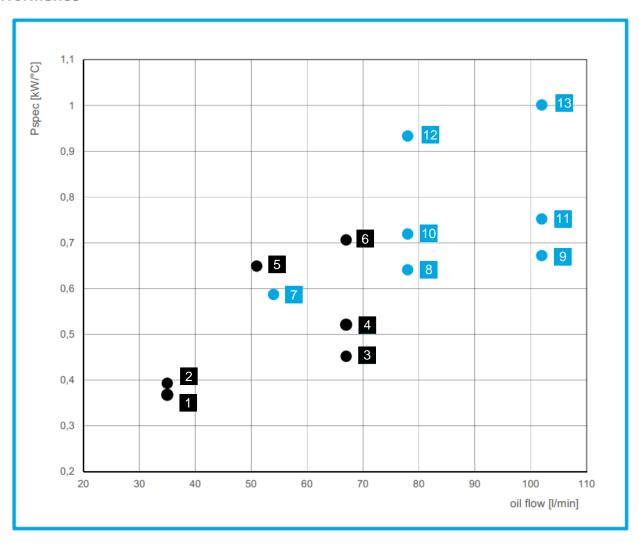




# OFFLINE Coolers Air Cooled Range / CC-2 Rail / 35-102 lpm



#### **Performance**



#### **Technical Data**

order number	description	oil flow	displace- ment	perfor- mance curve	max. working pressure	motor power	motor current	rotation	air flow	noise level
		[lpm]	[cm <sup>3</sup> / rotation]	see diagram	[bar]	[kW]	[A]	[rpm]	[kg/s]	[dB(A)]
ASATT21RA6AC4	TT 21 rail 230/400V 1,50kW 6-pol 40cc	35	40	1	6	1.50	6.3	950	1.19	65
ASATT25RA69C4	TT 25 rail 230/400V 1,10kW 6-pol 40cc	35	40	2	6	1.10	4.7	945	1.31	66
ASATT25RA69C8	TT 25 rail 230/400V 1,10kW 6-pol 80cc	67	80	3	6	1.10	4.7	945	1.31	68
ASATT36RA69C8	TT 36 rail 230/400V 1,10kW 6-pol 80cc	67	80	4	6	1.10	4.7	945	1.48	71
ASATT36RA69C6	TT 36 rail 230/400V 1,10kW 6-pol 60cc	51	60	5	6	1.10	4.7	945	2.32	73
ASATT36RA6AC8	TT 36 rail 230/400V 1,50kW 6-pol 80cc	67	80	6	6	1.50	6.3	950	2.33	72
ASATT25RA49C4	TT 25 rail 230/400V 1,50kW 4-pol 40cc	54	40	7	6	1.50	5.7	1445	2.02	79
ASATT25RA49C6	TT 25 rail 230/400V 1,50kW 4-pol 60cc	78	60	8	6	1.50	5.7	1445	2.02	79
ASATT25RA4AC8	TT 25 rail 230/400V 2,20kW 4-pol 80cc	102	80	9	6	2.20	7.9	1435	2.00	79
ASATT36RA49C6	TT 36 rail 230/400V 1,50kW 4-pol 60cc	78	60	10	6	1.50	5.7	1445	2.28	82
ASATT36RA4AC8	TT 36 rail 230/400V 2,20kW 4-pol 80cc	102	80	11	6	2.20	7.9	1435	2.26	82
ASATT36RA4BC6	TT 36 rail 230/400V 3,00kW 4-pol 60cc	78	60	12	6	3.00	10.5	1435	3.61	84
ASATT36RA4BC8	TT 36 rail 230/400V 3,00kW 4-pol 80cc	102	80	13	6	3.00	10.5	1435	3.61	84

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#### Design

radiator material	aluminium
radiator air fin shape	wavy
pump type	gerotor
pump material (housing)	aluminium
sheet metal material	coated steel

#### Compatibility

max. kinematic viscosity:	up to 500 mm²/s (depending on motor power)
suitable fluids	mineral oil acc. DIN51524

#### Connection (BSP 1")

ILLZATT53G25K	requires 1pc per cooler

#### **Options**

asa rail connector	ILLZATT53G32K (BSP 1 ¼")
temperature switch	ILLZTH4765K (50°C) ILLZTH6065K (60°C)
Rail filter	integrated spin on filter (page 6)
motor data	alternative voltages, frequencies, protection levels, etc on request
temperature bypass	for asa rail system (page 7)



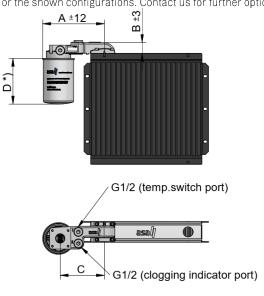
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# OFFLINE Coolers Air Cooled Range / Options

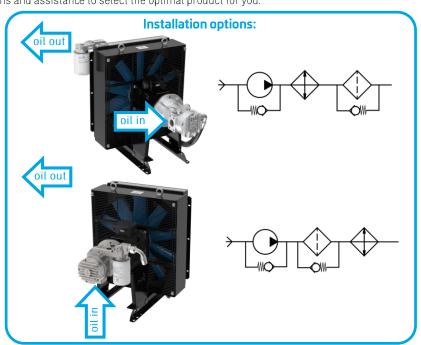


#### **System for Rail Series**

The H-Set is an optional system to integrate another hydraulic set to the asa rail system. The H-Set currently offers 2 sizes of kits to mount a spin on filter to the cooler application. This is a very compact and cost efficient integration. This system can also be combined with various other filters or the shown configurations. Contact us for further options and assistance to select the optimal product for you.



<sup>\*)</sup> depending on the make of the filter element



#### **Dimension**

order number	description	filter rating	working pressure	bypass incl.	spin on port	А	В	С	D
		[µm]	[bar]	[bar]	[BSP]	[mm]	[mm]	[mm]	[mm]
ILLZRF11G2010	Spin on filter kit rail 10µm, 60lpm	10	10	2	3/4"	188	33	135	146
ILLZRF11G2025	Spin on filter kit rail 25µm, 60lpm	25	10	2	3/4"	188	33	135	146
ILLZRF12G2010	Spin on filter kit rail 10µm, 100lpm	10	10	2	3/4"	188	33	135	191
ILLZRF12G2025	Spin on filter kit rail 25µm, 100lpm	25	10	2	3/4"	188	33	135	191
ILLZRF21G3210	Spin on filter kit rail 10µm, 180lpm	10	10	2	1 1/4"	228	47	160	181
ILLZRF21G3225	Spin on filter kit rail 25µm, 180lpm	25	10	2	1 1/4"	228	47	160	181

#### Rail-filter Block

	material:	aluminium
	working temperature range:	-20°C to +100°C (oil temperature)*
	Sealing to rail flange:	o-ring NBR
	bypass:	incl.2 bar standard setting
Hydraulic	Connection	
	compatible to	any rail system cooler
<b>Application</b>	on	
	main application	offline circuits, lubrication, cooling and filration circuits
	oil flow	from cooler to filter
Options		
	temperature switches	ILLZTH4765K, ILLZTH6065K ILLZTH5069K
	clogging indicator / indication pressure 1,5 bar	electric: HFZVEG15K N.O. & N.C.contact optical: HFZVOG15K

<sup>\*...</sup>the indicated temperature is the maximum inlet temperature for the cooler radiator.

Depending on the sealings in use, the application needs appropriate checking.



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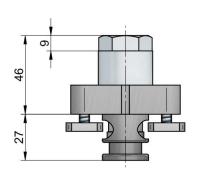


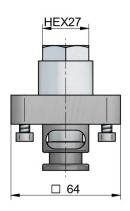
The thermal bypass valve is an accessory to our oil/air coolers with the asa rail system, also for easy retro fit on existing coolers in the field with internal bypass.

The function is to keep the cooling performance to a minimum on a permanent fan drive system avoiding unwanted cooling at cold start conditions. The valve opens the bypass channel below 50°C and closes for maximum oil flow through the oil channels above 50°C to 60°C. Moreover the function of a spring loaded bypass valve is also integrated to protect the radiator core in case of overpressure and high return oil flows e.g. when differential cylinders are used.

#### Dimension on top of cooler

(mounted on asa rail system)





# cold start / low cooling cooling over pressure function

#### **Technical Data**

order number	description	max. working temperature		closing temperature	relief pressure	max. working pressure (static)	weight
			[°C]	[°C]	[bar]	[bar]	[kg]
ILLZBPT5027K	thermo-BP valve 50°C TT16-TT25	80°C	< 58	50 to 60	2*	26	0.42

<sup>\*...</sup>opens only if temperature bypass is closed ( $\geq$ 60°C)

#### **Materials**

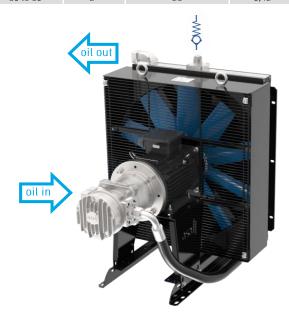
sealings	HNBR
rail flange	aluminium
corrosion protection temperature valve	all exposed surfaces: zinc-nickel plated

#### **Availability**

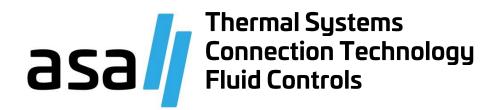
ILLZBPT5027K rail system coolers TT 21, TT25, TT36

#### Compatibility

_	
minimum fluid cleanness	class 20/18/15 acc. ISO 4406:1999
viscosity range:	10500mm²/s (cSt) recommended 15250mm²/s (cSt)



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# be different. make a difference.











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