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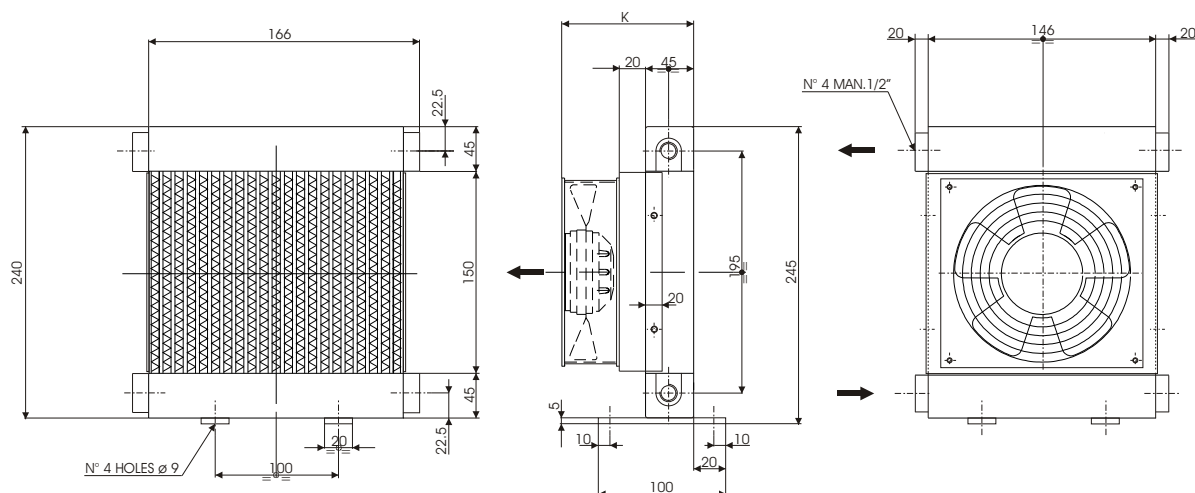
COMPONENTS FOR HYDRAULICS



HEAT EXCHANGERS

Air/oil coolers series CSL 04

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Weel.	dB (A)	K mm.
CSL 04.12.0.00	12	DC	2800	3,5	107	45	103
CSL 04.24.0.00	24	DC	2800	3,3	107	45	103
CSL 04.22.0.00	230	50/60	2650/3100	19/17	105	43/47	103



COOLER TECHNICAL DATA		FAN MOTORS TECHNICAL DATA	
Max working Pressure	:20 bar	Tension	CA: DIN 40050 DC: 12/24V
Max working Temperature	: + 120° C	Max Working Temperature	: + 75° C + 75° C
Max oil Viscosity	: 100 CST	Min Working Temperature	: - 10° C
Main Material	: Alluminium	Main Material	: Fiber Glass : Fiber Glass
Cooling Fluid	: Compatible Al	Motor Protection	: IP 20 : IP 20
Colour	: Black	Colour	: Black

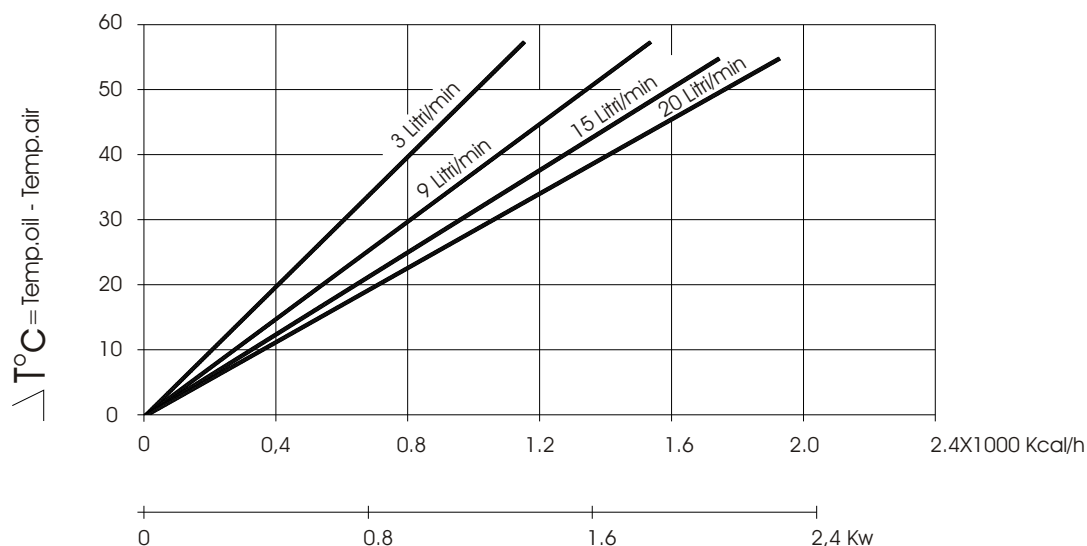
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 04.12.0.00			CSL 04.24.0.00		
01	Cooler	CSL04.00.0.00	01	Cooler	CSL04.00.0.00
02	Fan Motor	10.70164 .1	02	Fan Motor	10.70163 .1
03	Safety Guard	09.70168.1	03	Safety Guard	09.70168.1
04	Cowl	15.65579 .0	04	Cowl	15.65579 .0

CSL 04.22.0.00

01	Cooler	CSL04.00.0.00
02	Fan Motor	10.70144.1
03	Safety Guard	09.70168.1
04	Cowl	15.65579.0

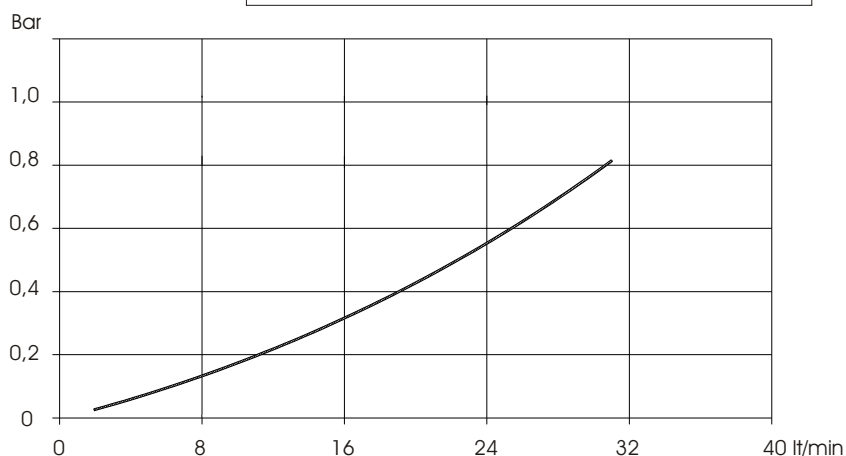
THERMIC EFFICIENCY



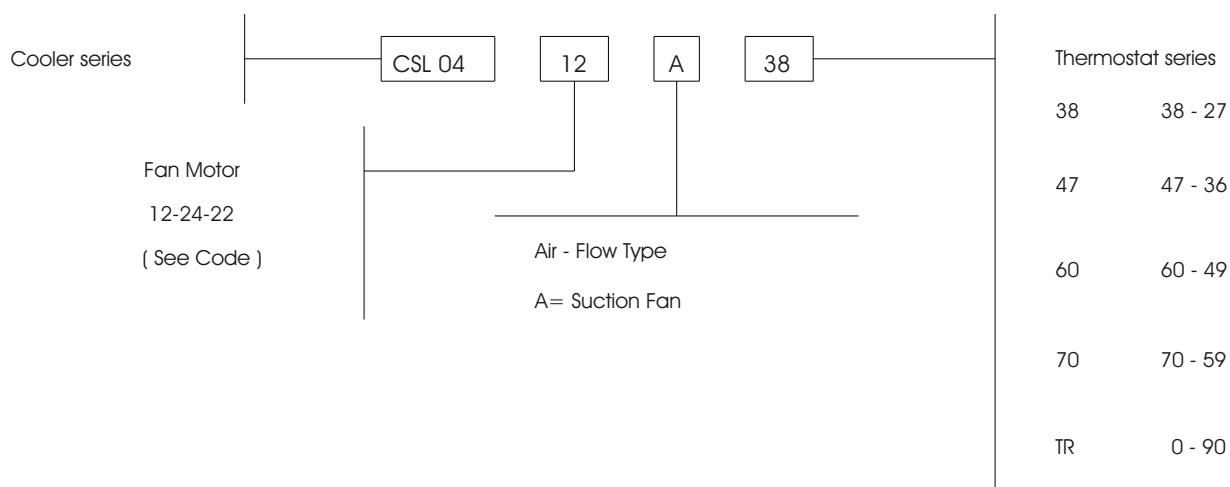
PRESSURE DROP

In order know different viscosity , please multiply temp.oil x correction factor

CST	10	15	20	30	40	50	60	80	100
C	0,5	0,65	0,75	1,0	1,2	1,4	1,6	2,1	2,8

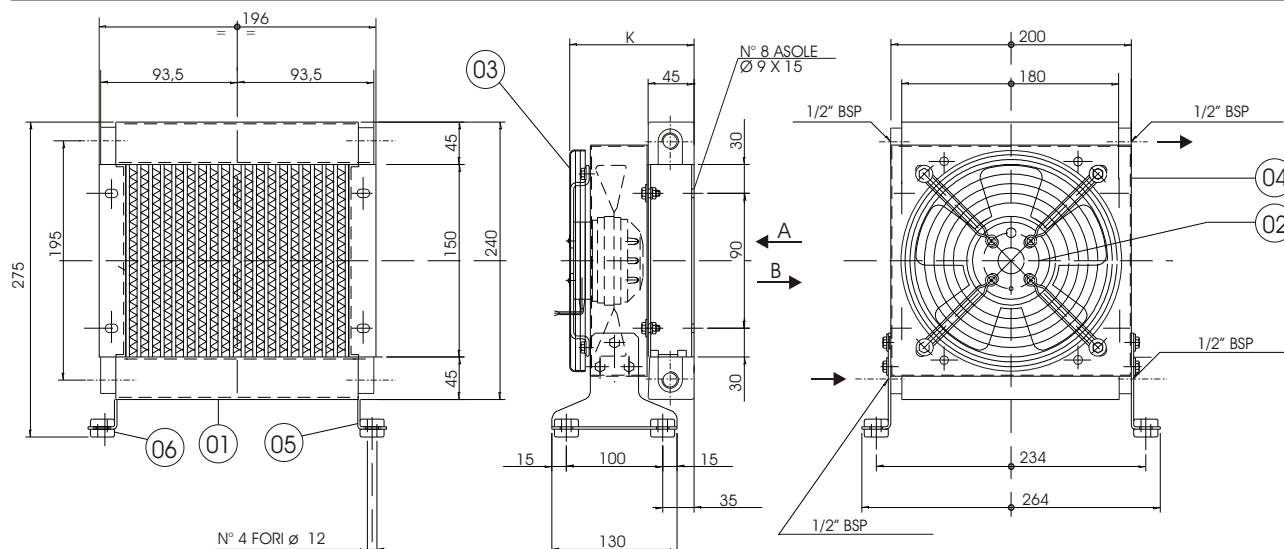


CODIFICATION



Air/oil coolers series CSL 05

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Weel.	dB (A)	K mm.
CSL 05.12.0.00	12	DC	4000	0.080	167	65	170
CSL 05.24.0.00	24	DC	4100	0.080	167	65	170
CSL 05.22.0.00	230	50/60	2650/2950	0.045/0.043	170	64	125
CSL 05.38.0.00	230/400	50/60	2650	0.040	170	64	125

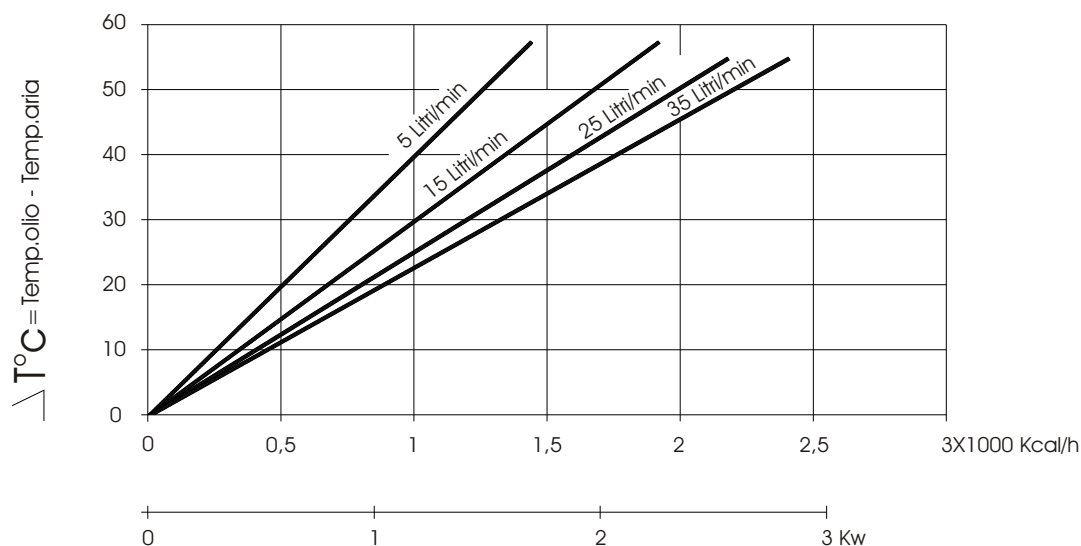


COOLER TECHNICAL DATA		FAN MOTORS TECHNICAL DATA	
Max working Pressure	:20 bar	Tension	CA: DIN IEC38 DC: 12/24V
Max working Temperature	: + 120° C	Max Working Temperature	: + 75° C + 75° C
Max oil Viscosity	: 100 CST	Min Working Temperature	: - 30° C
Main Material	: Alluminium	Main Material	: Steel : Fiber Glass
Cooling Fluid	: Compatible Al	Motor Protection	: IP 44 : IP 64
Colour	: Black	Colour	: Black

SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 05.12.0.00			CSL 05.24.0.00		
01	Cooler	CSL05.00.0.00	01	Cooler	CSL05.00.0.00
02	Fan Motor(Air Flow Suction)	10.70112 .1	02	Fan Motor(Air Flow Suction)	10.70113 .1
02	Fan Motor(Air Flow Blowing)	10.70114 .1	02	Fan Motor(Air Flow Blowing)	10.70115 .1
04	Cowl	15.65004 .0	04	Cowl	15.65004 .0
05	Fixing Support	15.65008 .0	05	Fixing Support	15.65008 .0
06	Shock Adsorber	20.80000 .1	06	Shock Adsorber	20.80000 .1
CSL 05.22.0.00			CSL 05.38.0.00		
01	Cooler	CSL05.00.0.00	01	Cooler	CSL05.00.0.00
02	Fan Motor(Air Flow Suction)	10.70026 .1	02	Fan Motor(Air Flow Suction)	10.70025 .1
02	Fan Motor(Air Flow Blowing)	10.70028 .1	02	Fan Motor(Air Flow Blowing)	10.70027 .1
03	Safety Guard	09.70117 .1	03	Safety Guard	09.70117 .1
04	Cowl	15.65004 .0	04	Cowl	15.65004 .0
05	Fixing Support	15.65008 .0	05	Fixing Support	15.65008 .0
06	Shock Adsorber	20.80000 .1	06	Shock Adsorber	20.80000 .1

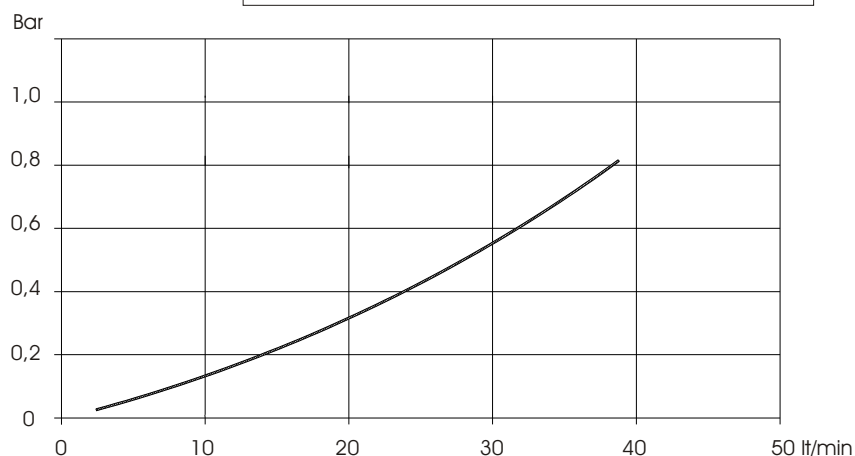
THERMIC EFFICIENCY



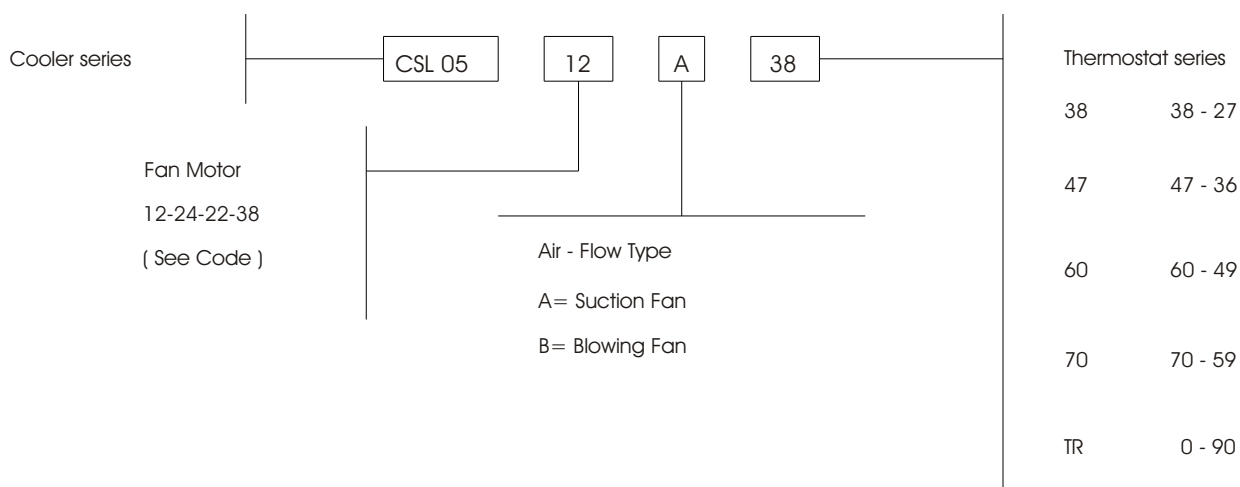
PRESSURE DROP

In order know different viscosity , please multiply temp.oil x correction factor

CST	10	15	20	30	40	50	60	80	100
C	0,5	0,65	0,75	1,0	1,2	1,4	1,6	2,1	2,8

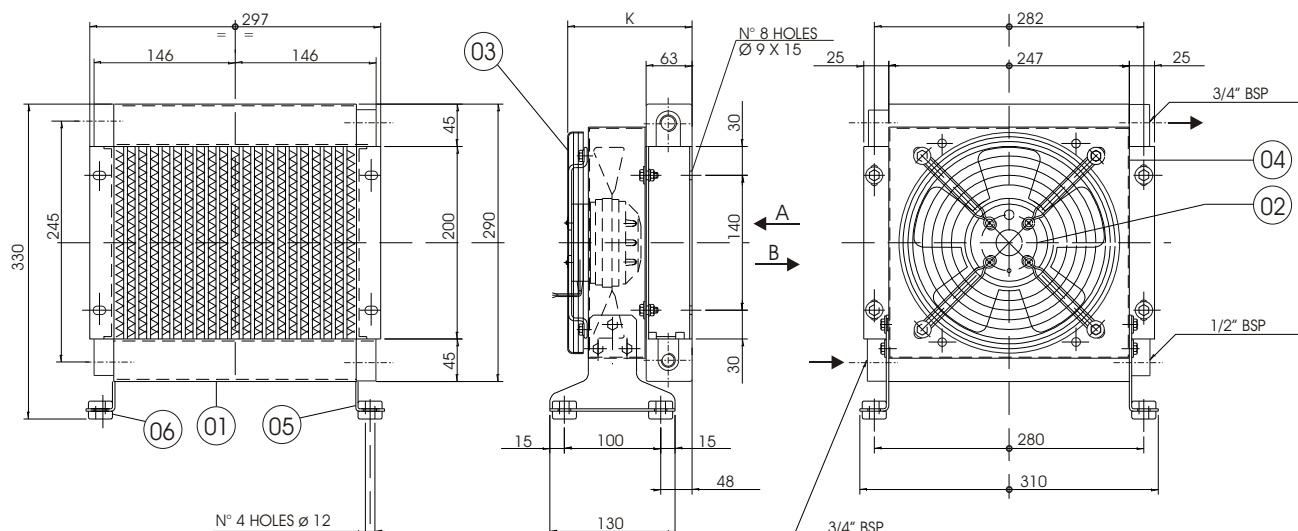


CODIFICATION



Air/oil coolers series CSL1

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Weel.	dB (A)	K mm.
CSL 1.12.0.00	12	DC	3100	0.100	225	67	145
CSL 1.24.0.00	24	DC	3100	0.100	225	67	145
CSL 1.22.0.00	230	50/60	2740/3120	0.050/0.061	200	68	170
CSL 1.38.0.00	230/400	50/60	2800/3150	0.053/0.056	200	68	170

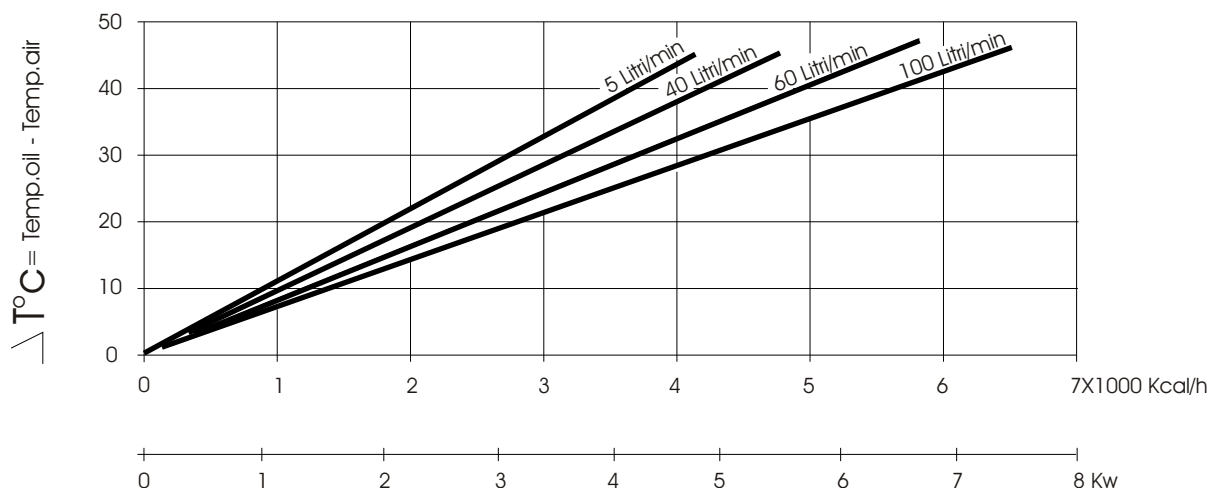


COOLER TECHNICAL DATA		FAN MOTORS TECHNICAL DATA	
Max working Pressure	:20 bar	Tension	CA: DIN IEC38 DC: 12/24V
Max working Temperature	: + 120° C	Max Working Temperature	: + 75° C + 75° C
Max oil Viscosity	: 100 CST	Min Working Temperature	: - 30° C
Main Material	: Alluminium	Main Material	: Steel : Fiber Glass
Cooling Fluid	: Compatible Al	Motor Protection	: IP 44 : IP 64
Colour	: Black	Colour	: Black

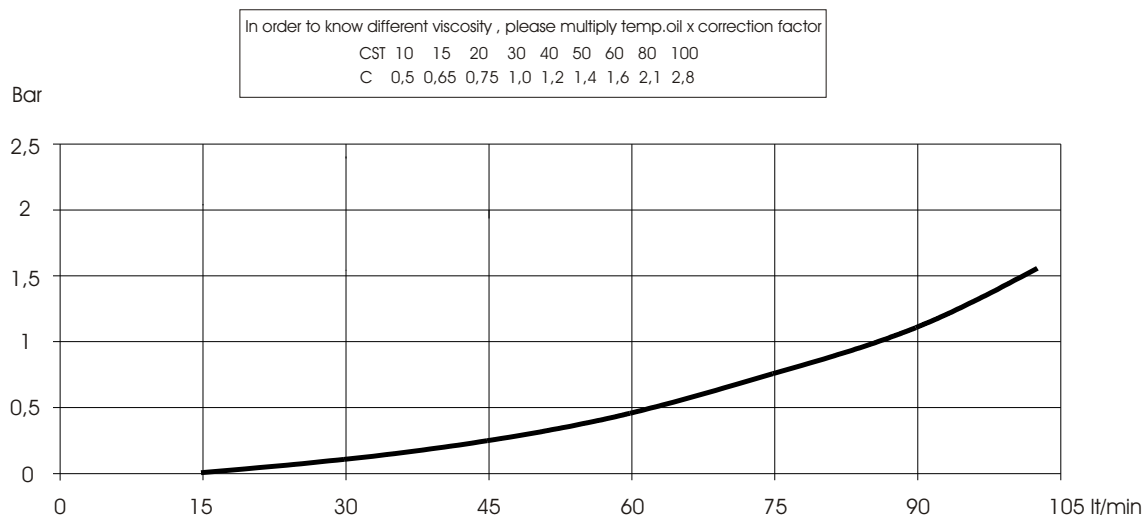
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 1.12.0.00			CSL 1.24.0.00		
01	Cooler	CSL1.00.0.00	01	Cooler	CSL1.00.0.00
02	Fan Motor(Air Flow Suction)	10.70100.1	02	Fan Motor(Air Flow Suction)	10.70101.1
02	Fan Motor(Air Flow Blowing)	10.70102.1	02	Fan Motor(Air Flow Blowing)	10.70103.1
04	Cowl	15.65005.0	04	Cowl	15.65005.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1
CSL 1.22.0.00			CSL 1.38.0.00		
01	Cooler	CSL1.00.0.00	01	Cooler	CSL1.00.0.00
02	Fan Motor(Air Flow Suction)	10.70002.1	02	Fan Motor(Air Flow Suction)	10.70001.1
02	Fan Motor(Air Flow Blowing)	10.70004.1	02	Fan Motor(Air Flow Blowing)	10.70003.1
03	Safety Guard	09.70050.1	03	Safety Guard	09.70050.1
04	Cowl	15.65005.0	04	Cowl	15.65005.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1

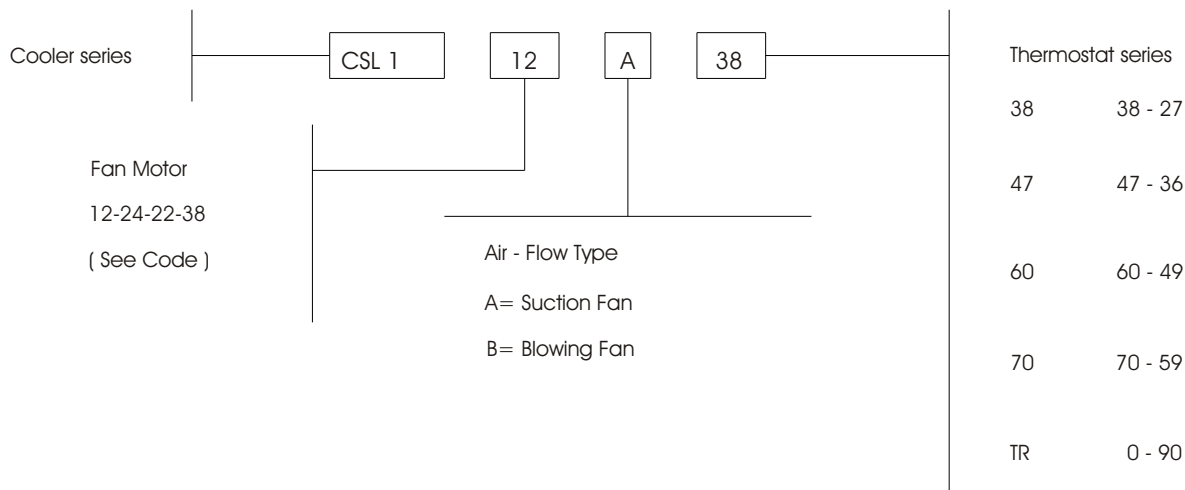
THERMIC EFFICIENCY



PRESSURE DROP

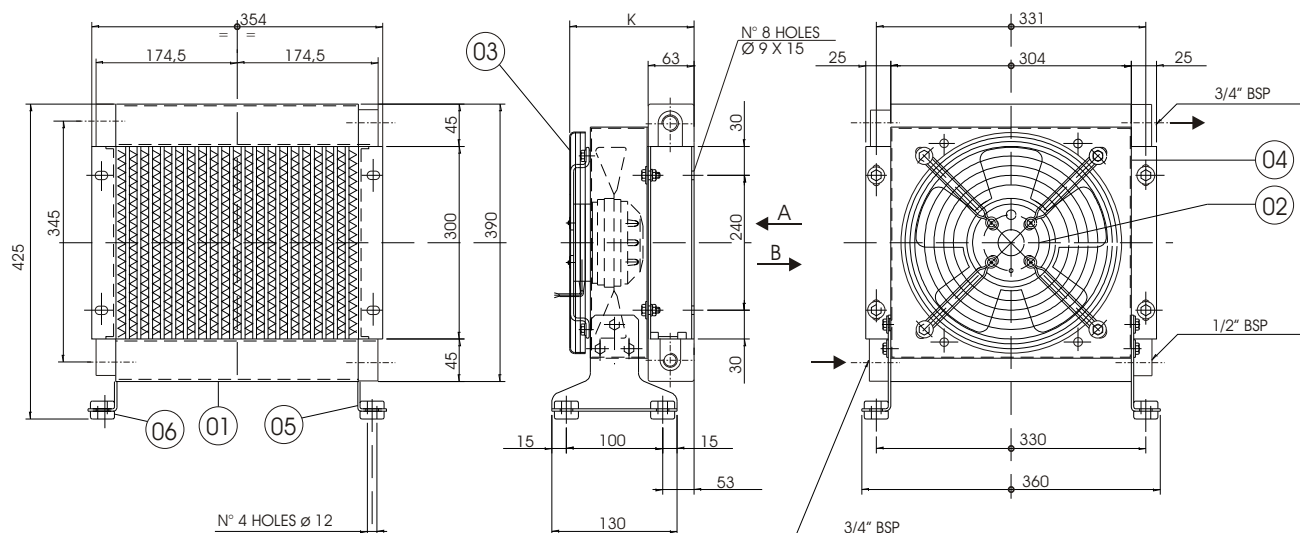


CODIFICATION



Air/oil coolers series CSL 2

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Well mm.	dB (A)	K mm.
CSL 2.12.0.00	12	DC	3350	0.125	255	67	155
CSL 2.24.0.00	24	DC	3350	0.125	255	67	155
CSL 2.22.0.00	230	50/60	2550/2750	0.115/0.155	250	68	155/170
CSL 2.38.0.00	230/400	50/60	2650/2900	0.110/0.160	250	68	155/170

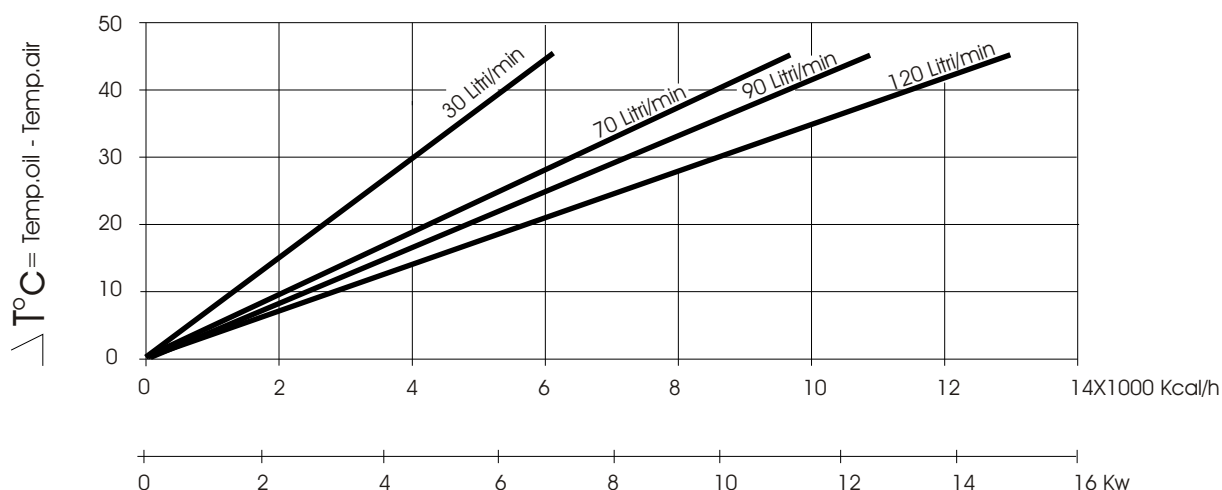


COOLER TECHNICAL DATA	FAN MOTORS TECHNICAL DATA
Max Working Pressure : 20 bar Max Working Temperature : + 120° C Max oil Viscosity : 100 CST Main Material : Alluminium Cooling Fluid : Compatbile Al Colour : Black	Tension CA: DIN IEC38 DC: 12/24V Max Working Temperature : + 75° C + 75° C Min Working Temperature : - 30° C Main Material : Steel : Fiber Glass Motor protection : IP 44 : IP 64 Colour : Black

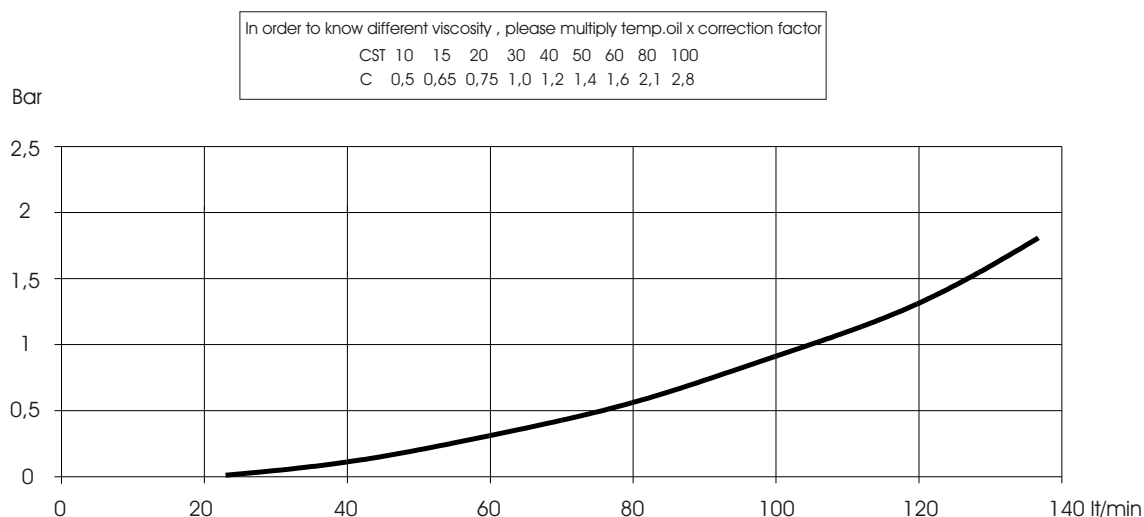
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 2.12.0.00			CSL 2.24.0.00		
01	Cooler	CSL2.00.0.00	01	Cooler	CSL2.00.0.00
02	Fan Motor(Air Flow Suction)	10.70104.1	02	Fan Motor(Air Flow Suction)	10.70105.1
02	Fan Motor(Air Flow Blowing)	10.70106.1	02	Fan Motor(Air Flow Blowing)	10.70107.1
04	Cowl	15.65006.0	04	Cowl	15.65006.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1
CSL 2.22.0.00			CSL 2.38.0.00		
01	Cooler	CSL2.00.0.00	01	Cooler	CSL2.00.0.00
02	Fan Motor(Air Flow Suction)	10.70006.1	02	Fan Motor(Air Flow Suction)	10.70005.1
02	Fan Motor(Air Flow Blowing)	10.70008.1	02	Fan Motor(Air Flow Blowing)	10.70007.1
03	Safety Guard(Air Flow Suction)	09.70051.1	03	Safety Guard(Air Flow Suction)	09.70051.1
03	Safety Guard(Air Flow Blowing)	09.70072.1	03	Safety Guard(Air Flow Blowing)	09.70072.1
04	Cowl	15.65006.0	04	Cowl	15.65006.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1

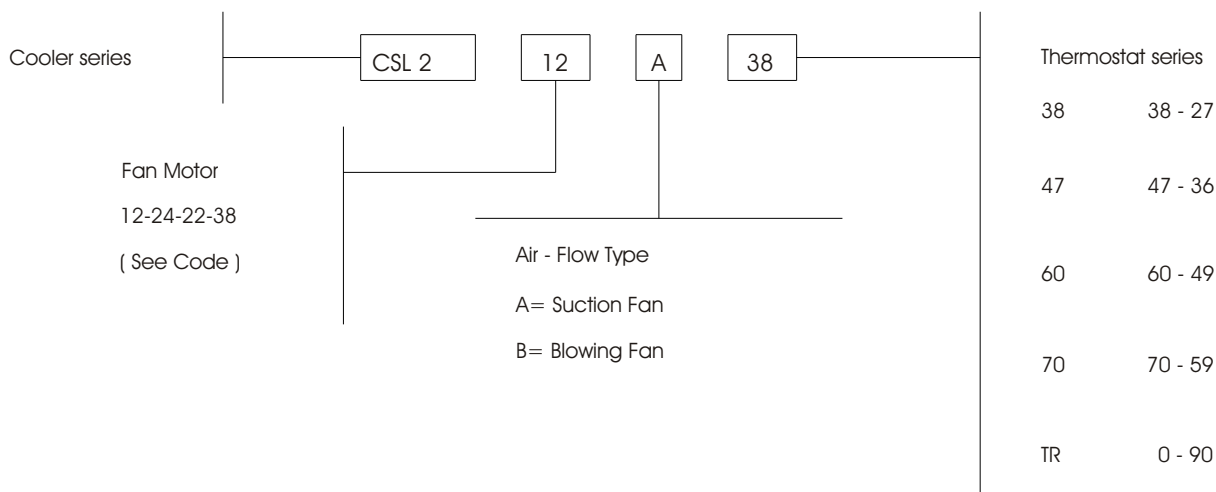
THERMIC EFFICIENCY



PRESSURE DROP

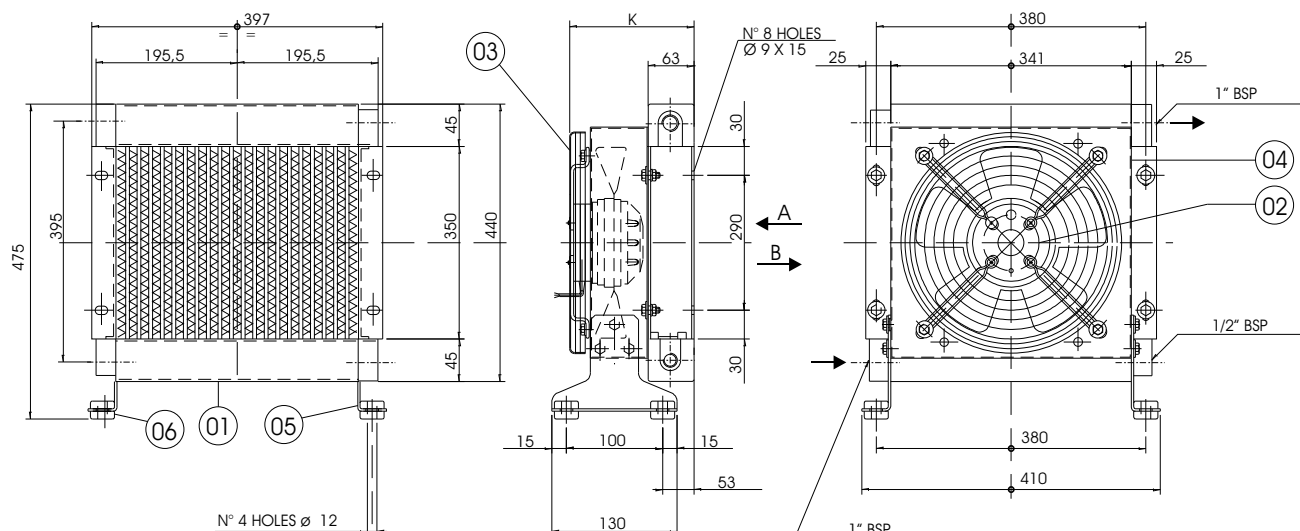


CODIFICATION



Air/oil coolers series CSL 3

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Well mm.	dB (A)	K mm.
CSL 3.12.0.00	12	DC	2300	0.125	305	69	170
CSL 3.24.0.00	24	DC	2300	0.125	305	69	170
CSL 3.22.0.00	230	50/60	2650/2950	0.160/0.205	300	70	155/170
CSL 3.38.0.00	230/400	50/60	2650/2800	0.180/0.270	300	70	155/170



COOLER TECHNICAL		FAN MOTORS TECHNICAL DATA		
Max Working Pressure	:20 bar	Tension	CA: DIN IEC38	DC: 12/24V
Max Working Temperature	: + 120° C	Max Working Temperature	: + 75° C	+ 75°C
Max oil Viscosity	: 100 CST	Min Working Temperature	: - 30° C	
Main Material	: Alluminium	Main Material	: Steel	: Fiber Glass
Cooling Fluid	: Compatible Al	Motor Protection	: IP 44	: IP 64
Colour	: Black	Colour	: Black	

SPARE PARTS

Pos.	Description	Code
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CSL 3.12.0.00		
01	Cooler	CSL3.00.0.00
02	Fan Motor(Air Flow Suction)	10.70108.1
02	Fan Motor(Air Flow Blowing)	10.70110.1
04	Cowl	15.65007.0
05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1

CSL 3.22.0.00		
01	Cowl	CSL3.00.0.00
02	Fan Motor(Fan Motor Suction)	10.70010.1
02	Fan Motor(Fan Motor Blowing)	10.70012.1
03	Safety Guard(Fan Motor Suction)	09.70052.1
04	Cowl	15.65007.0
05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1

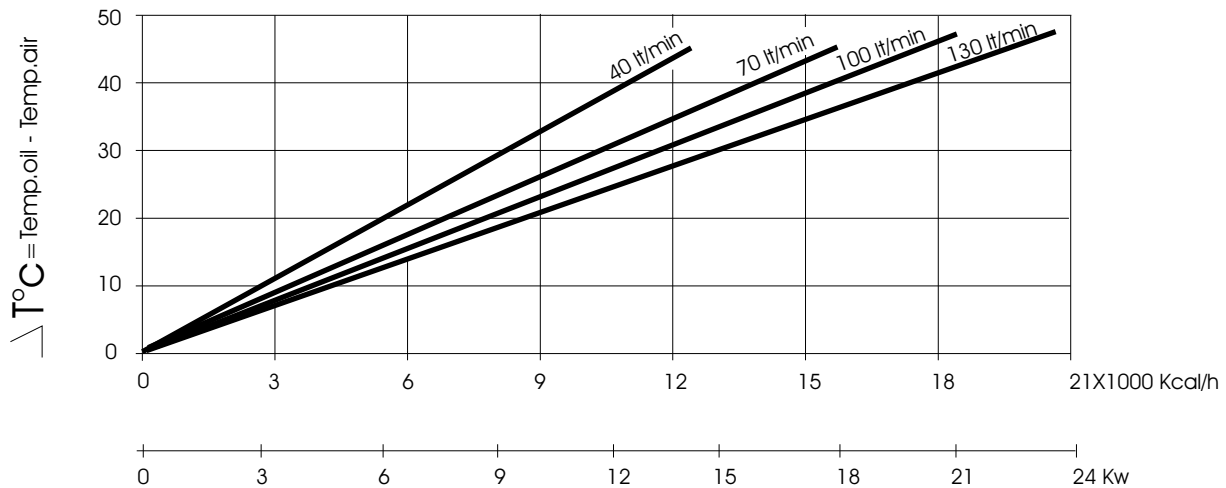
SPARE PARTS

Pos.	Description	Code
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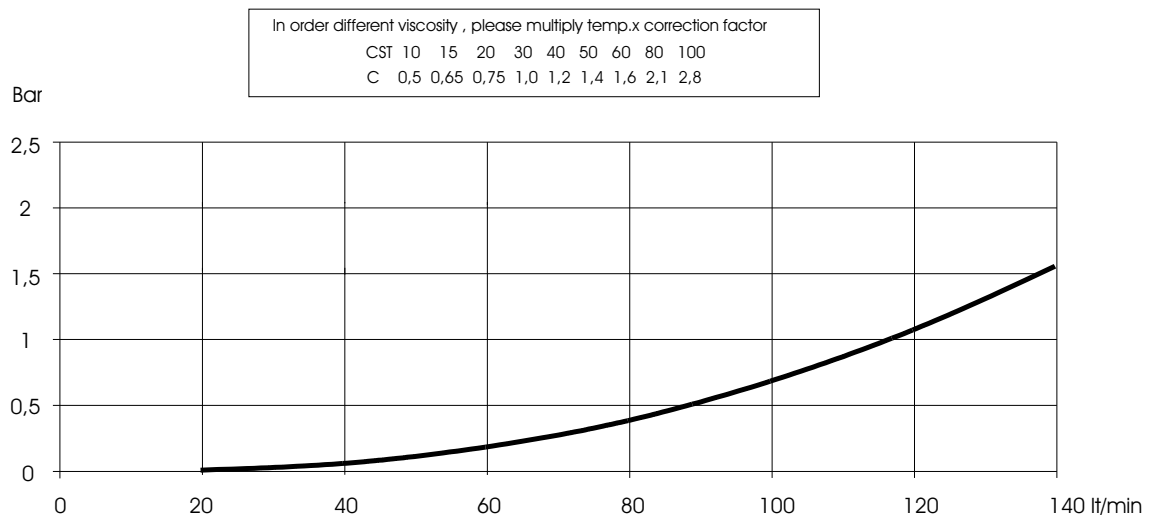
CSL 3.24.0.00		
01	Cooler	CSL3.00.0.00
02	Fan Motor(Air Flow Suction)	10.70109 .1
02	Fan Motor(Air Flow Blowing)	10.70111 .1
04	Cowl	15.65007 .0
05	Fixing Support	15.65008 .0
06	Shock Adsorber	20.80000 .1

CSL 3.38.0.00		
01	Cooler	CSL3.00.0.00
02	Fan Motor(Air Flow Suction)	10.70009 .1
02	Fan Motor(Air Flow Blowing)	10.70011 .1
03	Safety Guard(Air Flow Suction)	09.70052 .1
04	Cowl	15.65007 .0
05	Fixing Support	15.65008 .0
06	Shock Adsorber	20.80000 .1

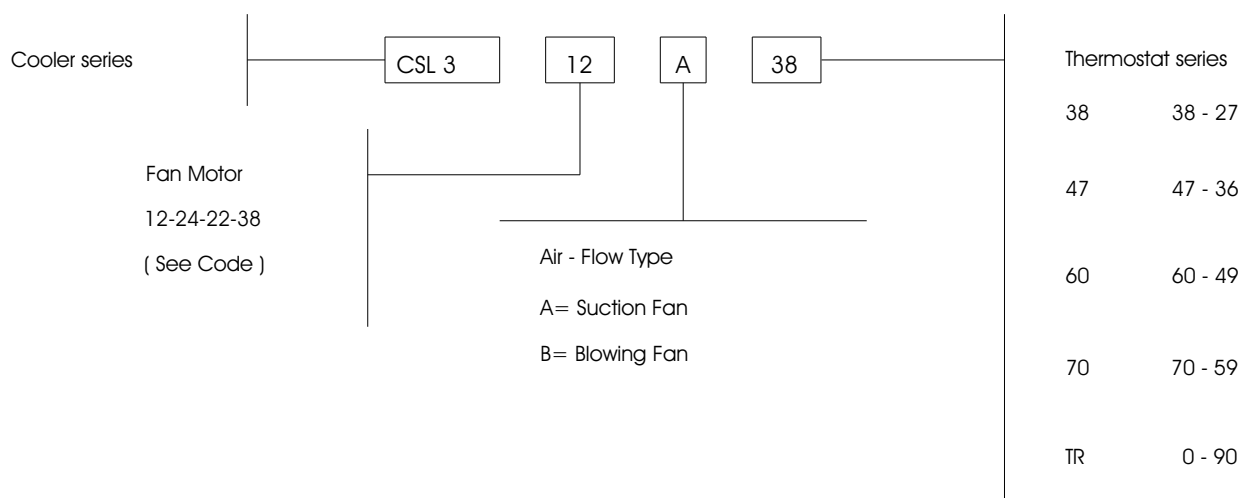
THERMIC EFFICIENCY



PRESSURE DROP

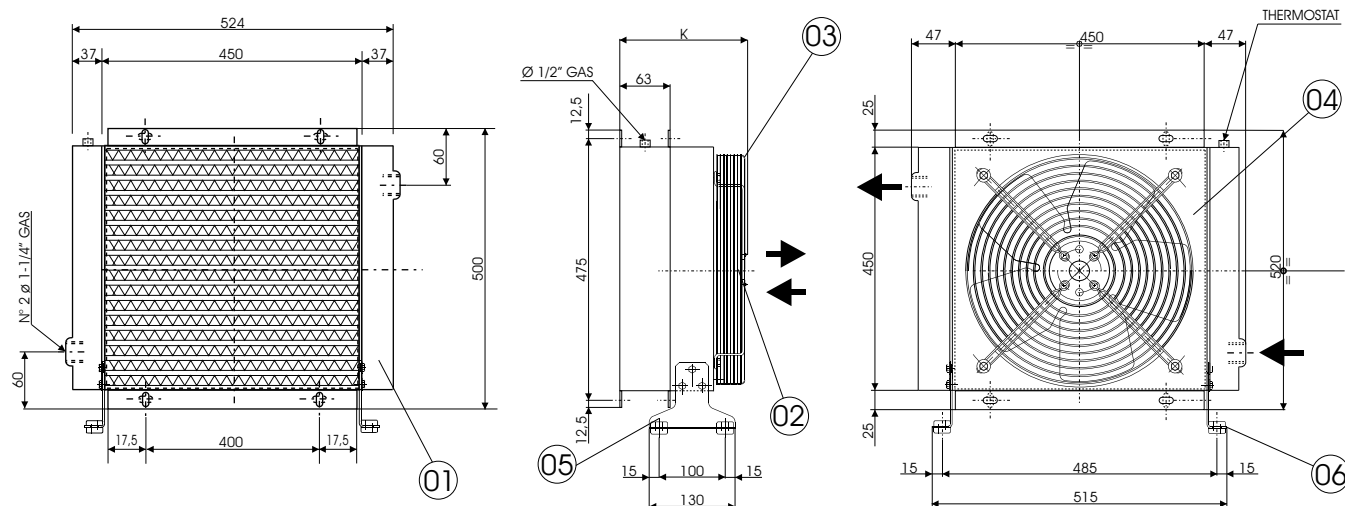


CODIFICATION



Air/oil coolers series CSL 4

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Well mm.	dB (A)	K mm.
CSL 4.12.0.00	12	DC	2300	0,125	385	67	185
CSL 4.24.0.00	24	DC	2300	0,125	385	67	185
CSL 4.22.0.00	230	50/60	1450/1700	0.160 / 0.204	400	73	243
CSL 4.38.0.00	230/400	50/60	1450/1690	0.135 / 0.185	400	72	243

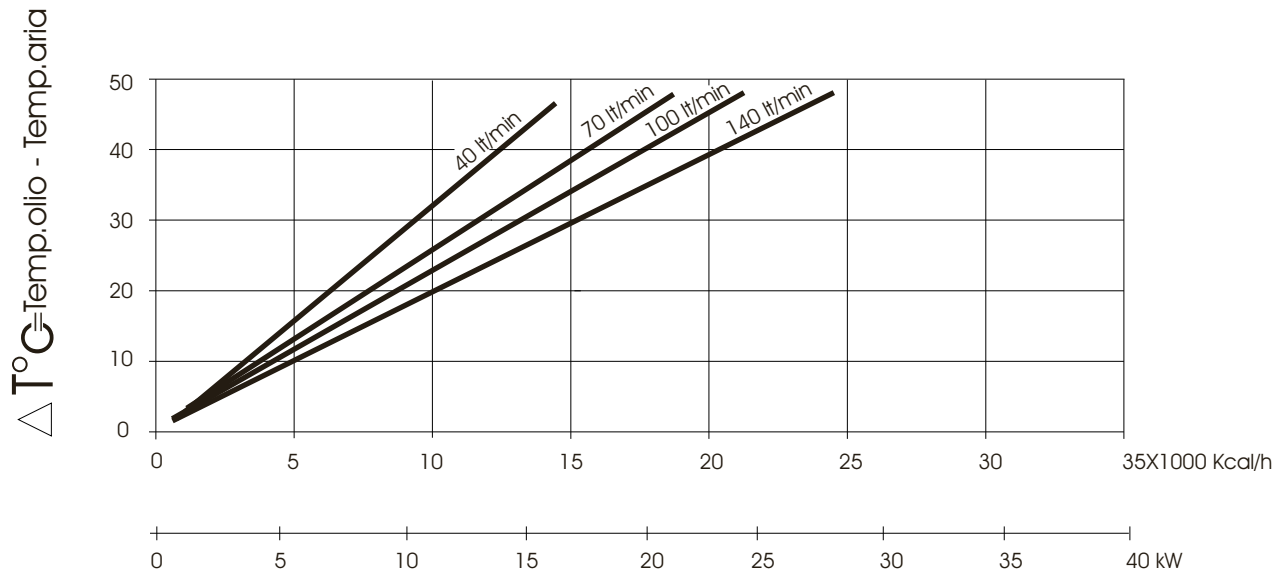


COOLER TECHNICAL	FAN MOTORS TECHNICAL DATA
Max Working Pressure : 20 bar	Tension CA: DIN IEC38 DC: 12/24V
Max Working Temperature : + 120° C	Max Working Temperature : + 75° C + 75° C
Max oil Viscosity : 100 CST	Min Working Temperature : - 30° C
Main Material : Alluminium	Main Material : Steel : Fiber Glass
Cooling Fluid : Compatible Al	Motor Protection : IP 44 : IP 64
Colour : Black	Colour : Black

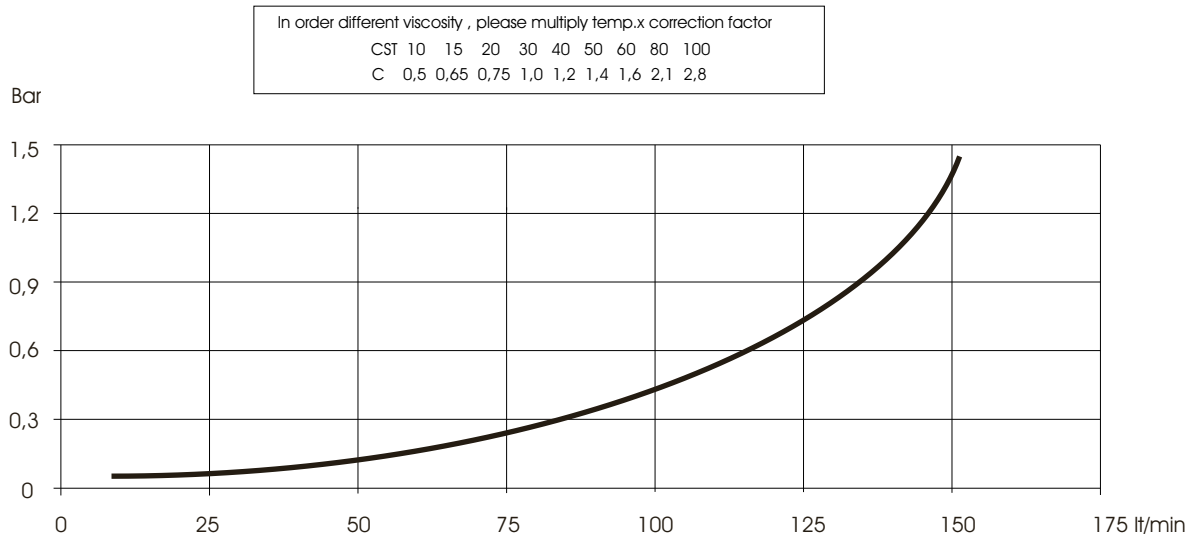
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 4.12.0.00			CSL 4.24.0.00		
01	Cooler	CSL4.00.0.00	01	Cooler	CSL4.00.0.00
02	Fan Motor(Air Flow Suction)	10.70429.1	02	Fan Motor(Air Flow Suction)	10.70426.1
02	Fan Motor(Air Flow Blowing)	10.70430.1	02	Fan Motor(Air Flow Blowing)	10.70431.1
04	Cowl	15.65031.0	04	Cowl	15.65031.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1
CSL 4.22.0.00			CSL 4.38.0.00		
01	Cowl	CSL4.00.0.00	01	Cooler	CSL4.00.0.00
02	Fan Motor(Fan Motor Suction)	10.70042.1	02	Fan Motor(Air Flow Suction)	10.70015.1
02	Fan Motor(Fan Motor Blowing)	10.70043.1	02	Fan Motor(Air Flow Blowing)	10.70016.1
03	Safety Guard(Fan Motor Suction)	09.70073.1	03	Safety Guard(Fan Motor Suction)	09.70073.1
04	Cowl	15.65571.0	04	Cowl	15.65571.0
05	Fixing Support	15.65008.0	05	Fixing Support	15.65008.0
06	Shock Adsorber	20.80000.1	06	Shock Adsorber	20.80000.1

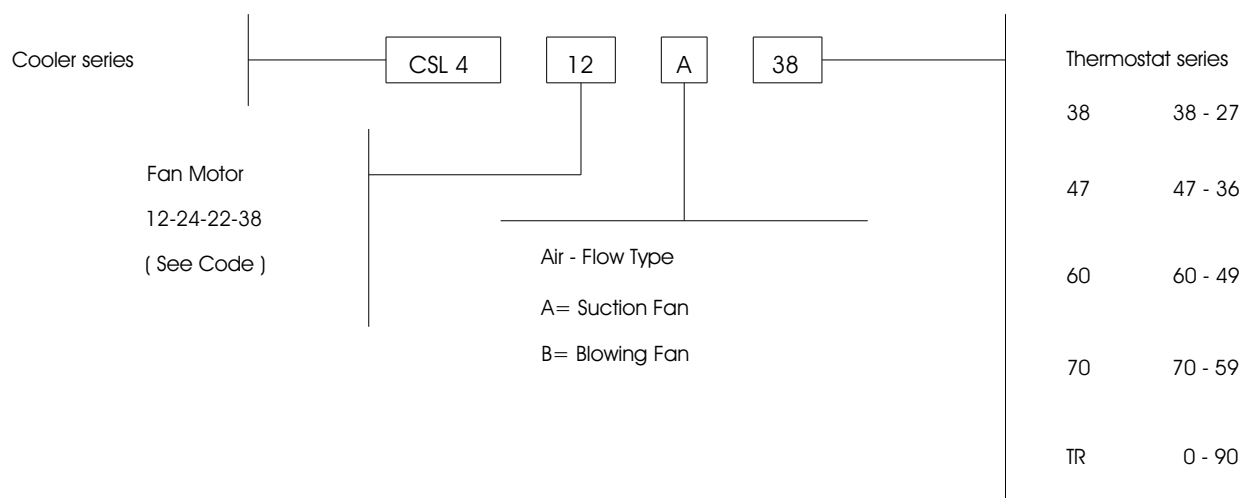
THERMIC EFFICIENCY



PRESSURE DROP

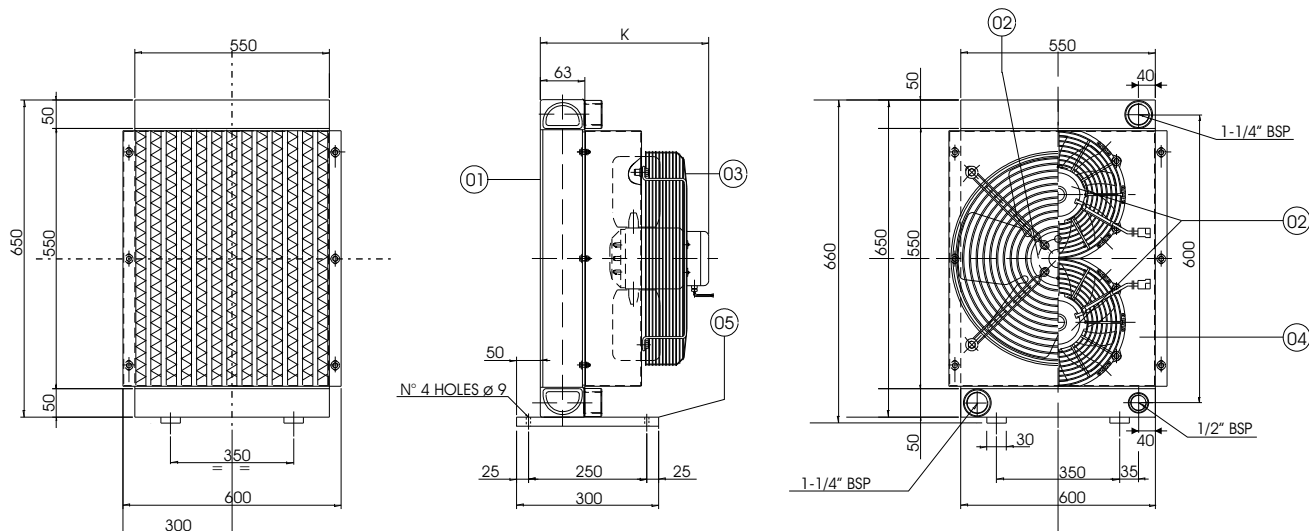


CODIFICATION



Air/oil coolers series CSL 5

Code	Tension V	Frequency Hz	Rpm	Power kW	Dia.Fan Well mm.	dB (A)	K mm.
CSL 5.12.0.00	12	DC	3350	0.125+0.125	255	74	168
CSL 5.24.0.00	24	DC	3350	0.125+0.125	255	74	168
CSL 5.38.0.00	230/400	50/60	1340	0.45	450	75	329
CSL 5.G2.0.00			800/2500	0.45	450	75	359

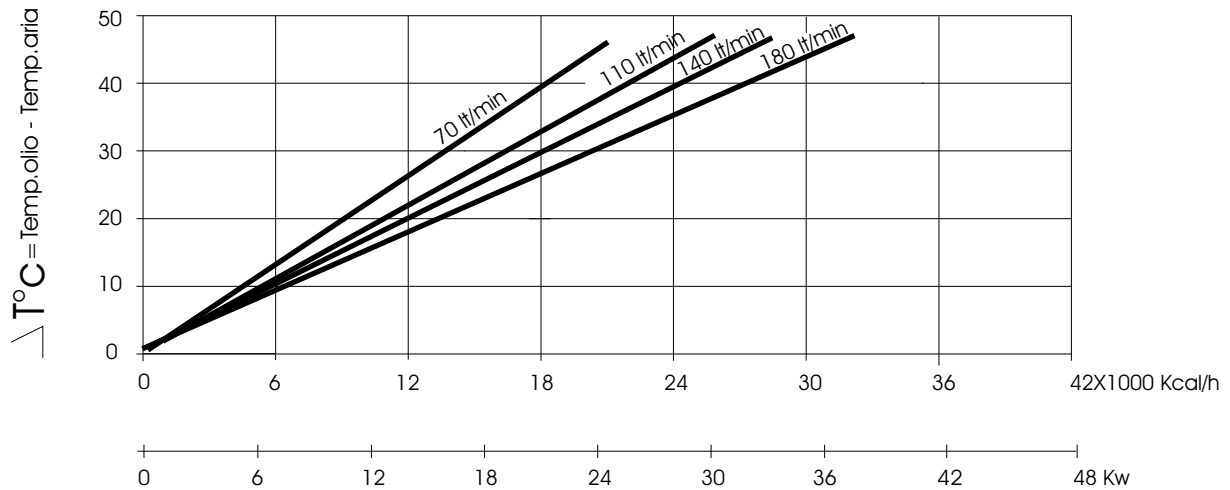


COOLER TECHNICAL		FAN MOTORS TECHNICAL DATA	
Max Working Pressure	:20 bar	Tension	CA: DIN IEC38 DC: 12/24V
Max Working Temperature	: + 120° C	Max Working Temperature	: + 75° C + 75° C
Max oil Viscosity	: 100 CST	Min Working Temperature	: - 30° C
Main Material	: Alluminium	Main Material	: Steel : Fiber Glass
Cooling Fluid	: Compatible Al	Motor Protection	: IP 44 : IP 64
Colour	: Black	Colour	: Black

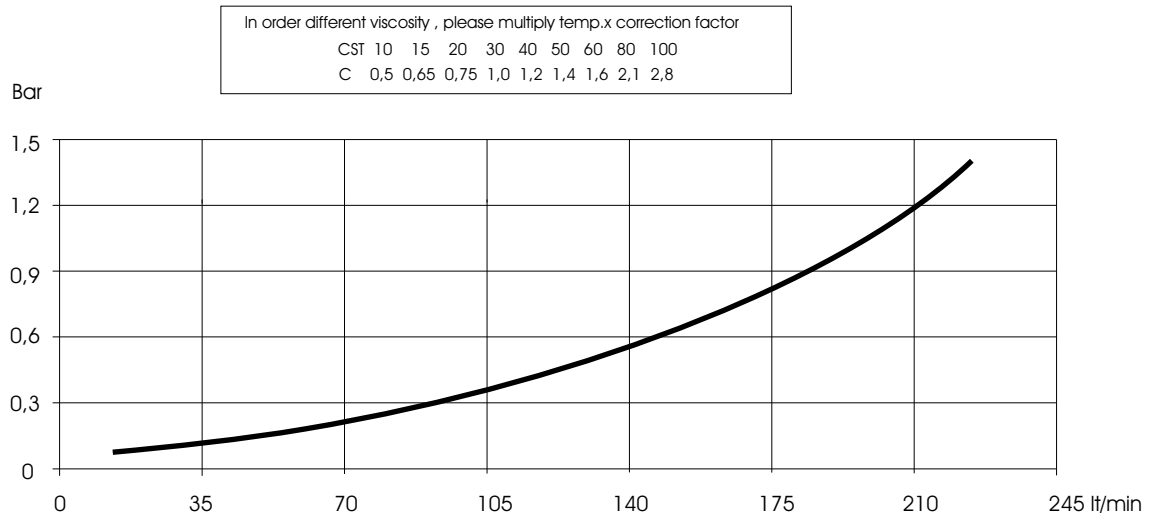
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSL 5.12.0.00			CSL 5.24.0.00		
01	Cooler	CSL5.00.0.00	01	Cooler	CSL5.00.0.00
02	Fan Motor (Air Flow Suction)	10.70104.1	02	Fan Motor (Air Flow Suction)	10.70105.1
02	Fan Motor (Air Flow Blowing)	10.70106.1	02	Fan Motor (Air Flow Blowing)	10.70107.1
04	Cowl	15.65010.0	04	Cowl	15.66366.0
05	Fixing Support	15.65017.0	05	Fixing Support	15.65017.0
CSL 5.38.0.00			CSL 5.G2.0.00		
01	Cooler	CSL5.00.0.00	01	Cooler	CSL5.00.0.00
02	Fan Motor (Air Flow Suction)	10.70017.1	02	Fan Motor (Air Flow Suction)	11.70378.1
02	Fan Motor (Air Flow Blowing)	10.70018.1	02	Fan Motor (Air Flow Blowing)	11.70379.1
03	Safety Guard	10.70058.1	03	Safety Guard	10.70009.1
04	Cowl	15.65406.0	04	Cowl	15.65406.0
05	Fixing Support	15.65017.0	05	Fixing Support	15.65017.0

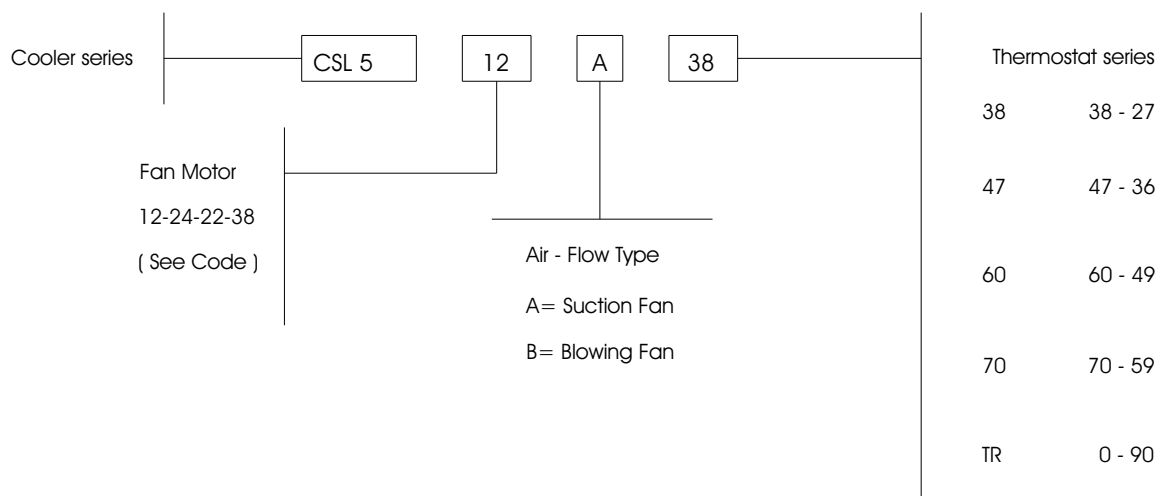
THERMIC EFFICIENCY



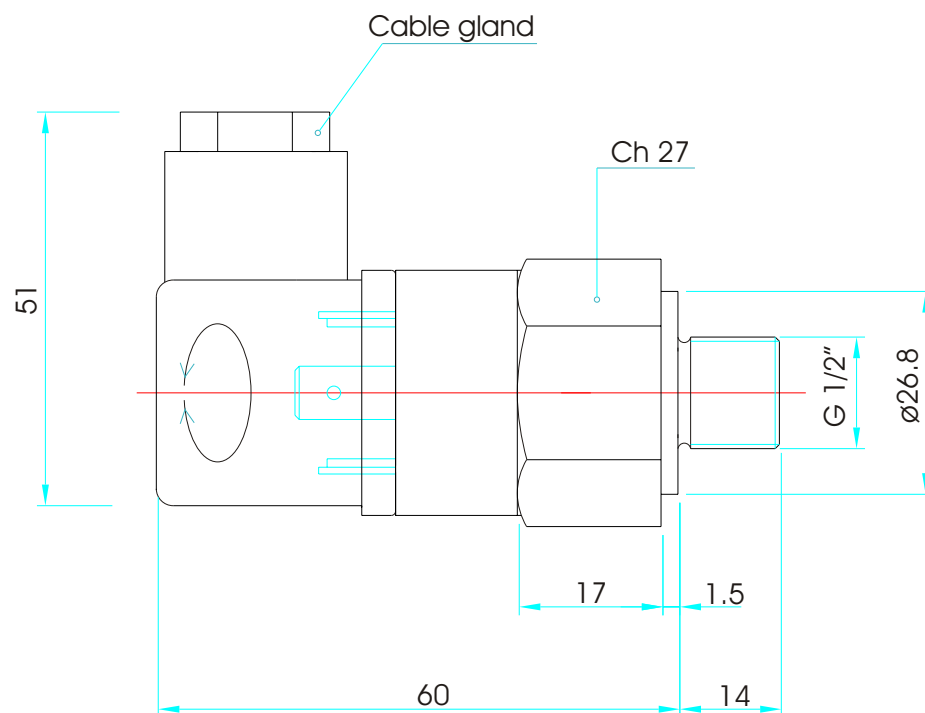
PRESSURE DROP



CODIFICATION



FIXED BIMETALLIC THERMOSTAT TYPE "TF"



TECHNICAL DATA - MATERIAL

TECHNICAL DATA

Handling contacts	10 A - 240 Vac
Differential overload	11° C
Maximum temperature	130°C
Protection	IP65 DIN 40050
Connector PG09	DIN 43650
Maximum temperature	120°C

MATERIAL

Case Ch 27	Anodized aluminium
Thermostat case	Thermoplastic

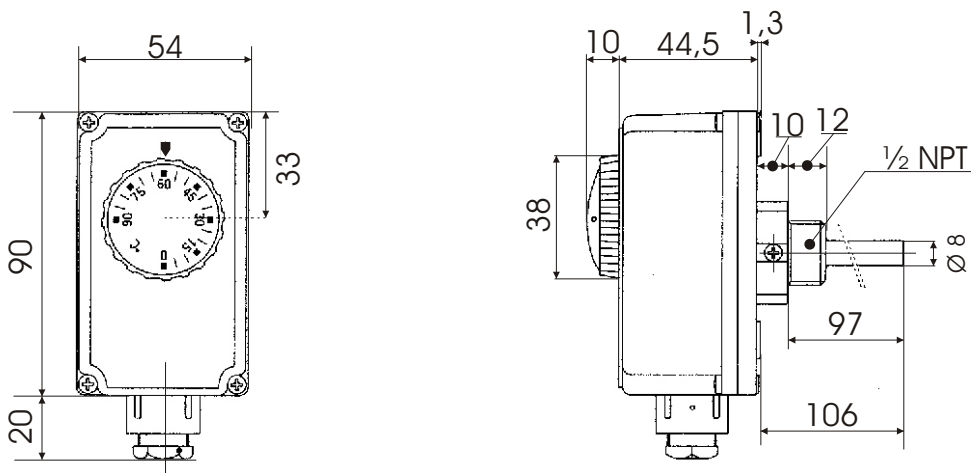
CODIFICATION

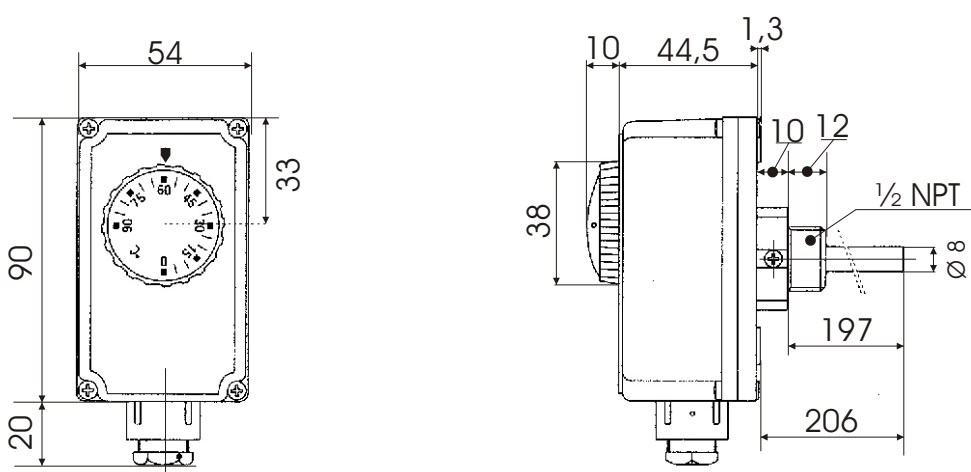
Thermostat type	TF 38	Full operating range
		38= 38 ÷ 27
		47= 47 ÷ 36
		60= 60 ÷ 49
		70= 70 ÷ 59
		80= 80 ÷ 69

Technical characteristic herein mentioned are not binding and it can be modified without any notice

Components: Adjustable thermostat type "TR"

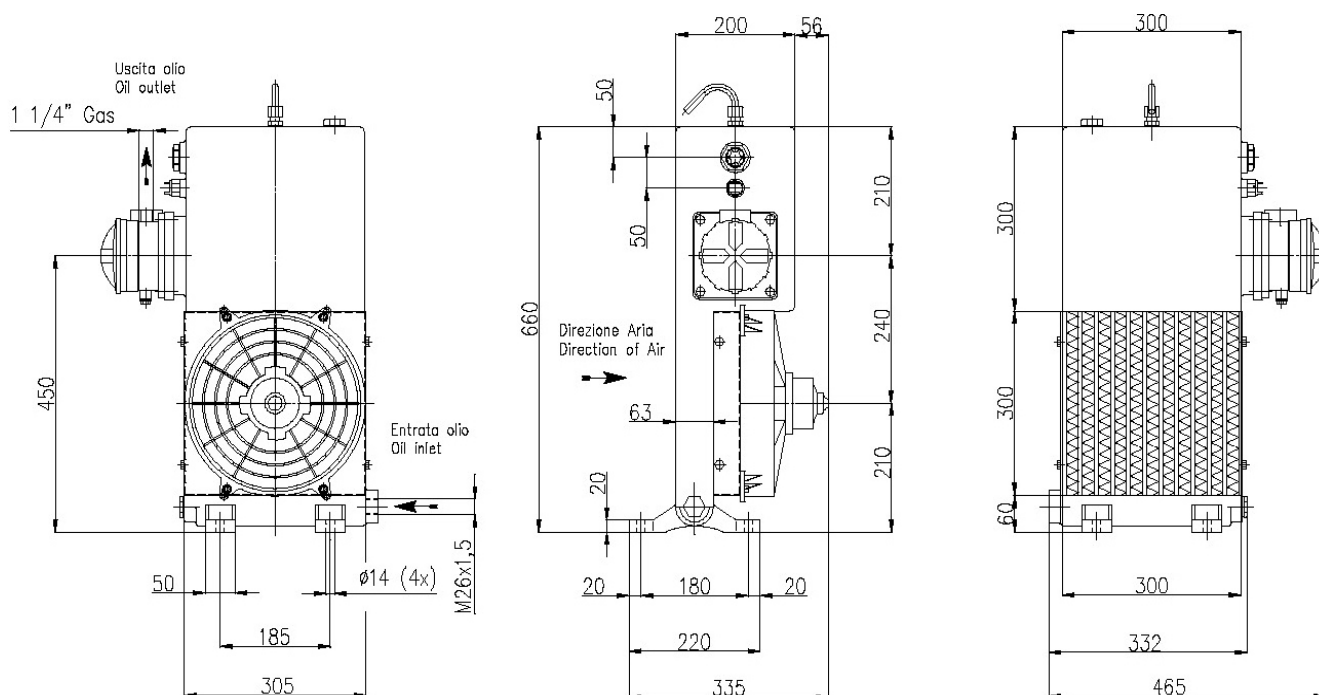
Componenti: Termostato regolabile tipo "TR"

Code TR 100 Codice: TR 100		
	Technical data Temperature range: 0 - 90 ° C Maximum temperature, Head 80 ° C , Bulk 125 ° C Temperature differential: 6 +/- 2 K Power: 250 V (10 A) , 380 V (7 A) - resistive Degree of protection : IP 40; Maximum pressure of sheat: 10 bar Silvercontacts	Dati tecnici Campo di regolazione temperatura: 0 - 90 ° C Temperatura massima, Testa 80 ° C , Bulbo 125 ° C Differenziale: 6 +/- 2 K Tensione: 250 V (10 A) , 380 V (7 A) - resistivi Grado di protezione : IP 40; Massima pressione guaina: 10 bar Contatti in argento

Code TR 200 Codice: TR 200		
	Technical data Temperature range: 0 - 90 ° C Maximum temperature, Head 80 ° C , Bulk 125 ° C Temperature differential: 6 +/- 2 K Power: 250 V (10 A) , 380 V (7 A) - resistive Degree of protection : IP 40; Maximum pressure of sheat: 10 bar Silvercontacts	Dati tecnici Campo di regolazione temperatura: 0 - 90 ° C Temperatura massima, Testa 80 ° C , Bulbo 125 ° C Differenziale: 6 +/- 2 K Tensione: 250 V (10 A) , 380 V (7 A) - resistivi Grado di protezione : IP 40; Massima pressione guaina: 10 bar Contatti in argento

Air/oil coolers series CSK 2

Code	Tension V	Frequency Hz	Rpm	Power Kw	Dia.Fan Well mm.	dB (A)
CSK 2.12.0.00	12	DC	3350	0.250	255	70
CSK 2.24.0.00	24	DC	3350	0.250	255	70

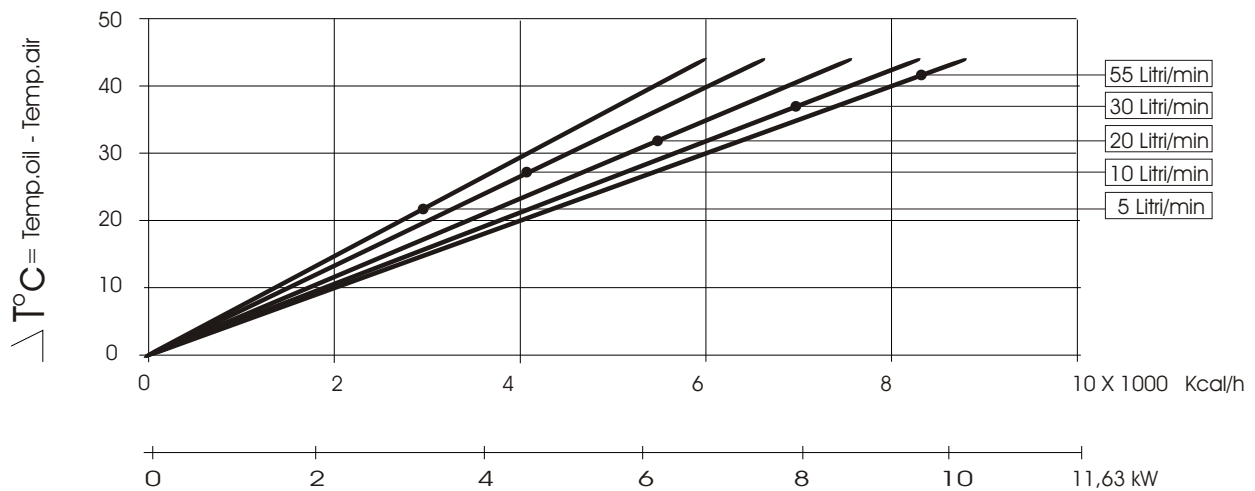


COOLER TECHNICAL DATA		FAN MOTORS TECHNICAL DATA	
Max Working Pressure	: 5 bar	Tension	CA: DIN IEC38 DC: 12/24V
Max Working Temperature	: + 120° C	Max Working Temperature	: + 75° C + 75° C
Max oil Viscosity	: 220 CST	Min Working Temperature	: - 30° C
Main Material	: Alluminium	Main Material	: Steel : Fiber Glass
Cooling Fluid	: Compatibile Al	Motor protection	: IP 44 : IP 64
Colour	: Black	Colour	: Black

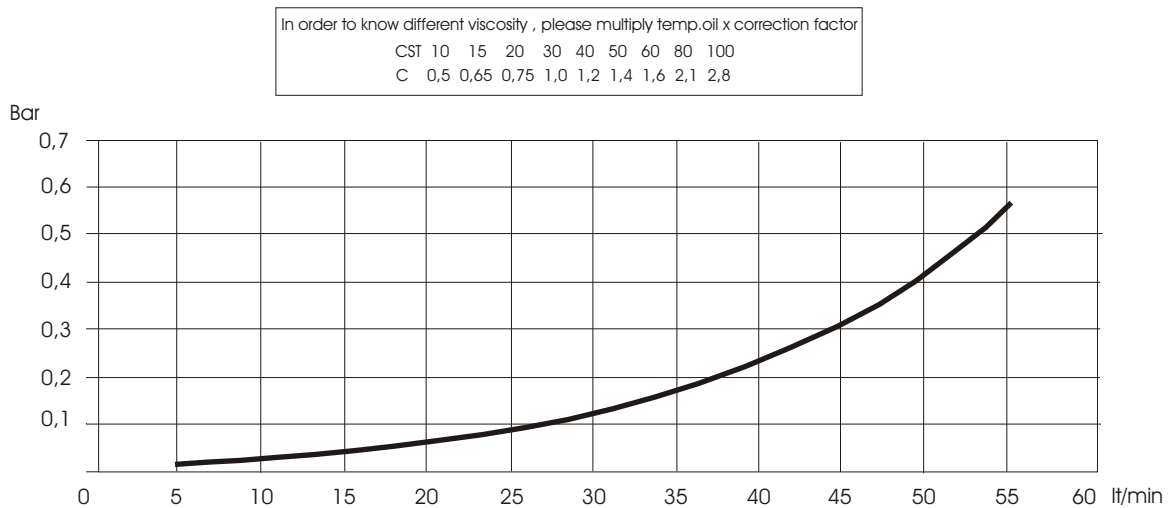
SPARE PARTS

Pos.	Description	Code	Pos.	Description	Code
CSK 2.12.0.00			CSK 2.24.0.00		
01	Cooler	CSK2.00.0.00	01	Cooler	CSK2.00.0.00
02	Fan Motor(Air Flow Suction)	10.70104.1P	02	Fan Motor(Air Flow Suction)	10.70105.1P
02	Fan Motor(Air Flow Blowing)	10.70106.1P	02	Fan Motor(Air Flow Blowing)	10.70107.1P
04	Cowl	15.66367.0	04	Cowl	15.66367.0

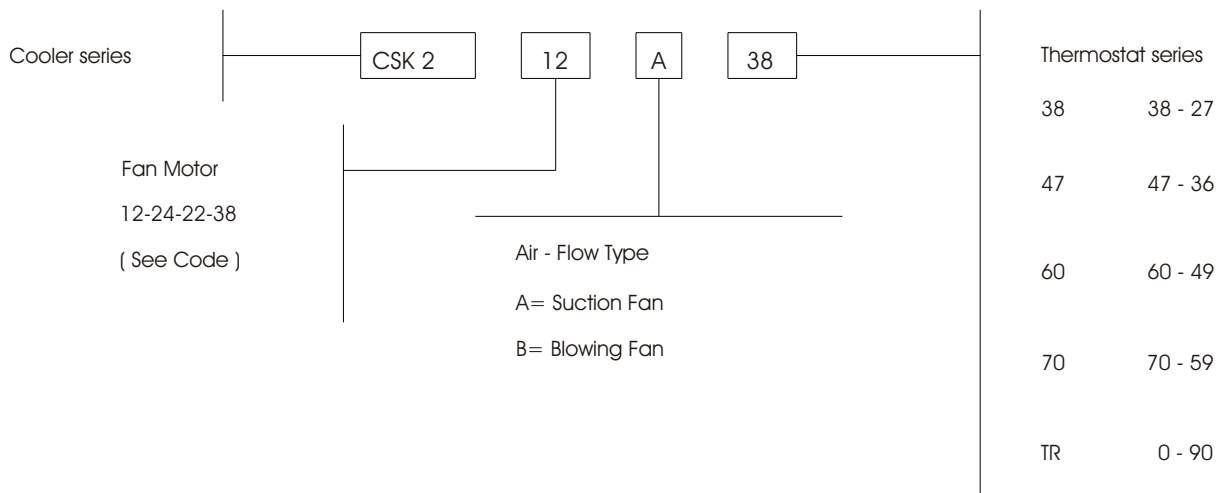
THERMIC EFFICIENCY



PRESSURE DROP



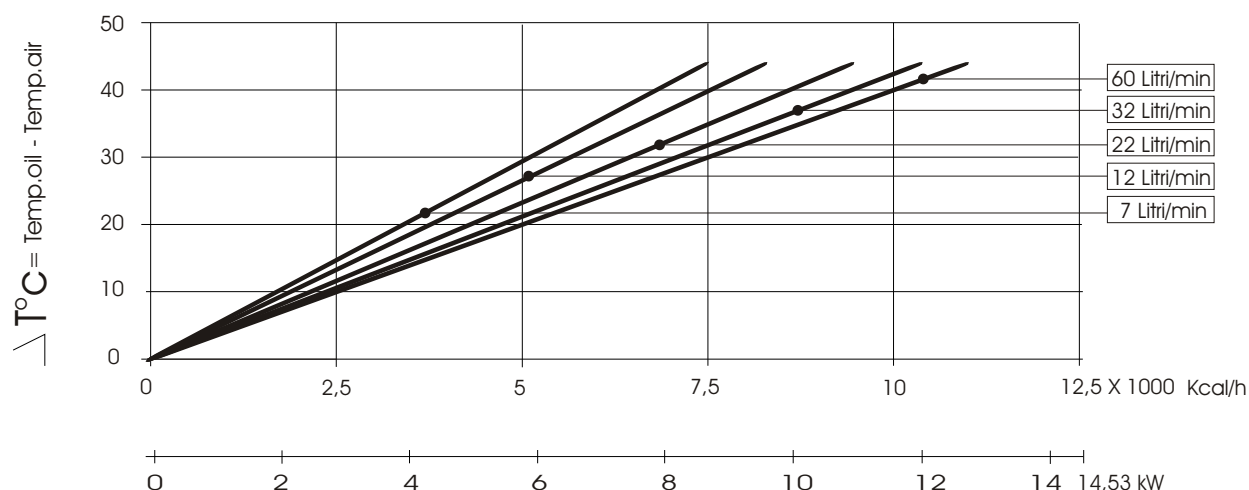
CODIFICATION



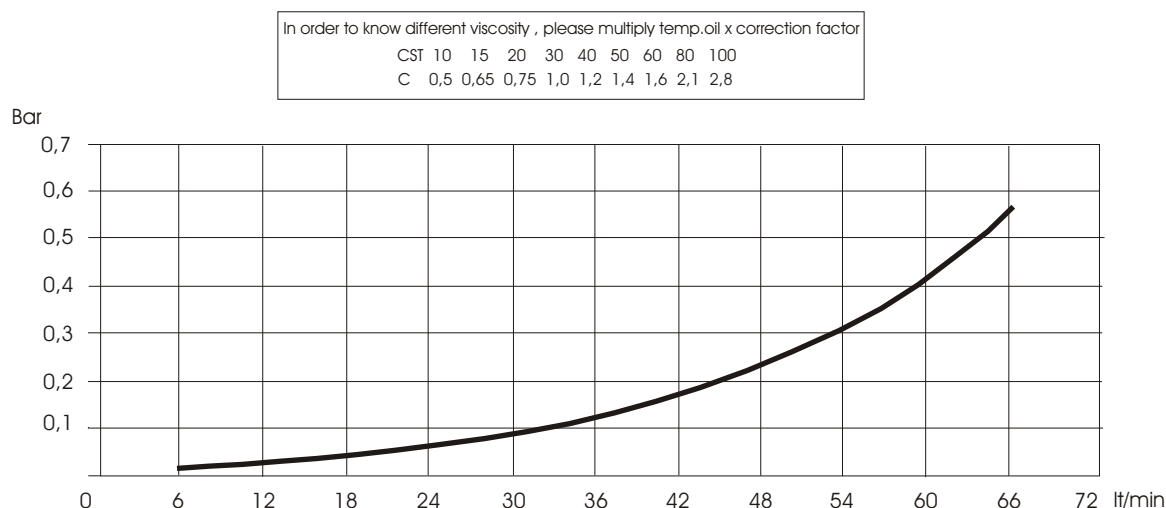
Technical characteristic herein mentioned are not binding and it can be modified without any notice

Pos.	Description	Code	Pos.	Description	Code
CSK 3.12.0.00			CSK 3.24.0.00		
01	Cooler	CSK3.00.0.00	01	Cooler	CSK3.00.0.00
02	Fan Motor(Air Flow Suction)	10.70104.1P	02	Fan Motor(Air Flow Suction)	10.70105.1P
02	Fan Motor(Air Flow Blowing)	10.70106.1P	02	Fan Motor(Air Flow Blowing)	10.70107.1P
04	Cowl	15.66367.0	04	Cowl	15.66367.0

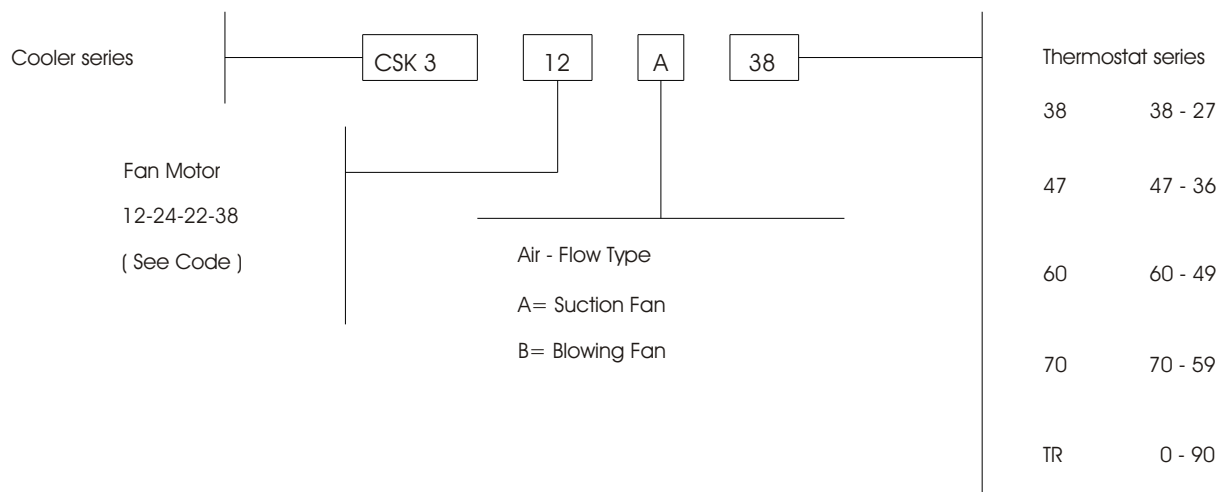
THERMIC EFFICIENCY



PRESSURE DROP



CODIFICATION

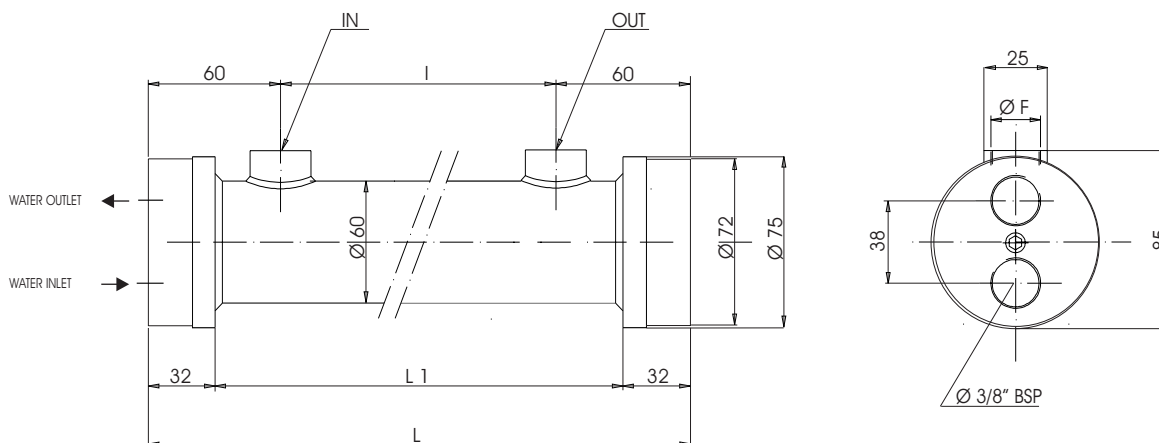


Technical characteristic herein mentioned are not binding and it can be modified without any notice

Water/oil coolers series CSW 1

Code	Capacity	Oil flow (L/min)	kW Dissipated (With oil 55 °C and H ₂ O 20 °C)	Weigth	Over all dimensions			
					F	I	L	L1
CSW1 - 14 - 2	0.4	5 - 30	1,3 - 2,5	2.1	1/2"	140	260	196
CSW1 - 26 - 2	0.6	7.5 - 40	2,2 - 3,8	4.0	1/2"	260	380	316
CSW1 - 44 - 2	0.9	10 - 50	3,3 - 4,5	6.5	1/2"	440	560	496

* SEPARATE SUPPLY : N° 2 WATER MAFF $\varnothing$ 3/8" ÷ $\varnothing$ 13 L=20 mm



The kW stated in schedule are referred at conditions indicated on the Performance diagram "A"

Code	Shell	Covers	Seals	Pipes	Tubing plate	Deflector baffles
All	Fe 510.2	Al Si 13	NBR	CuDHP	C40	C37

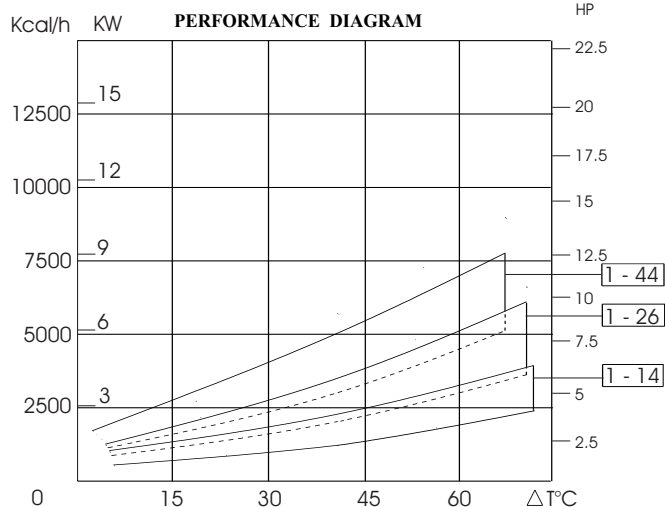
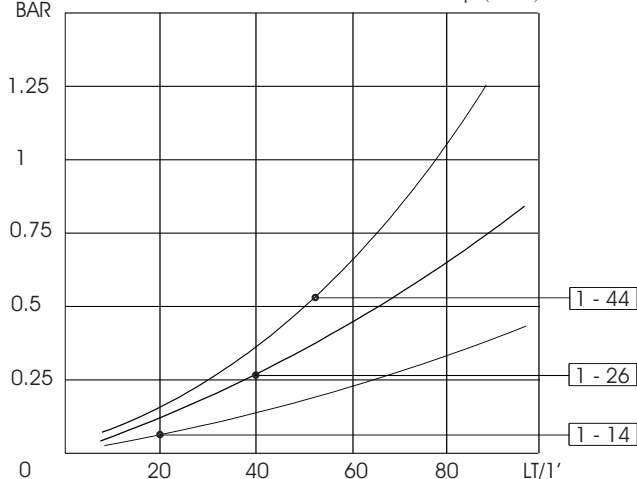
COOLERS TECHNICAL DATA

Max Working Pressure	: 12 bar
Test Pressure	: 18 bar
Max Working Temperature	: + 99° C

CORRECTION FACTOR (C) - PRESSURE DROP

CSt	10	15	20	30	40	50	60	80	100	200	300
C	0,50	0,65	0,75	1,00	1,20	1,40	1,60	1,90	2,10	3,10	4,20

PRESSURE DROP - Values in indicated the schedule V 30 mmq./s (~30 cSt)

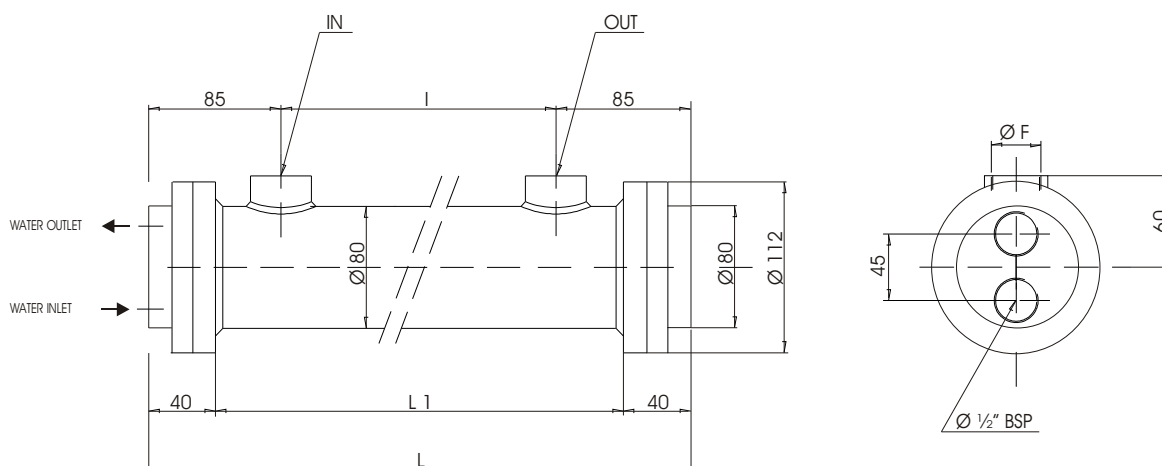


Technical characteristic herein mentioned are not binding and it can be modified without any notice.

Water/oil coolers series CSW 2

Code	Capacity	Oil flow (L/min)	kW Dissipated (With oil 55 °C and H ₂ O 20 °C)	Weight	Over all dimensions			
					F	I	L	L1
CSW2 -12-2	0.7	20 - 50	1,9 - 3,5	3.2	3/4"	120	290	210
CSW2 -28-2	1.1	25 - 60	3,9 - 5,9	4.5	3/4"	280	460	370
CSW2 -53-2	1.9	30 - 80	5,6 - 8,5	7.0	3/4"	530	710	620

* SEPARATE SUPPLY: N° 2 WATER MAFF $\varnothing \frac{1}{2}" \div \varnothing 13$ L=20 mm



The kW stated in schedule are referred at conditions indicated on the Performance diagram "A"

Code	Shell	Covers	Seals	Pipes	Tubing plate	Deflector baffles
All	Fe 510.2	C40/Al Si 13	NBR	CuDHP	C40	C37

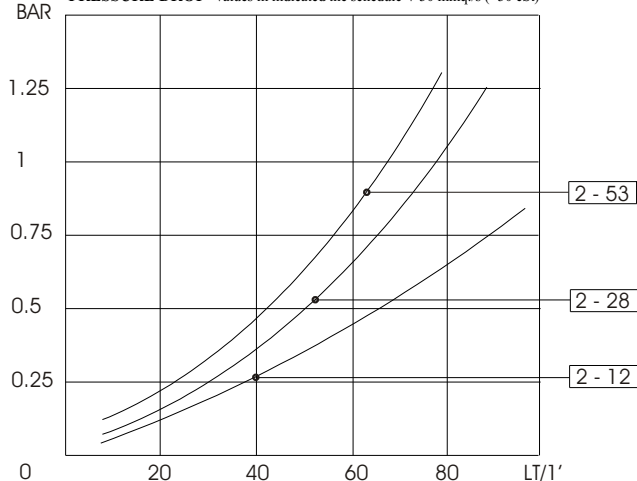
COOLERS TECHNICAL DATA

Max Working Pressure	: 12 bar
Test Pressure	: 18 bar
Max Working Temperature	: + 99° C

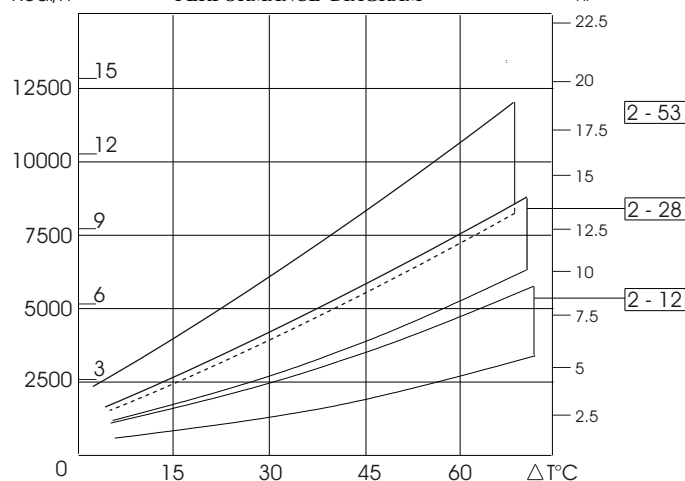
CORRECTION FACTOR (C) - PRESSURE DROP

CS†	10	15	20	30	40	50	60	80	100	200	300
C	0,50	0,65	0,75	1,00	1,20	1,40	1,60	1,90	2,10	3,10	4,20

PRESSURE DROP - Values in indicated the schedule V 30 mmq./s (~30 cSt)

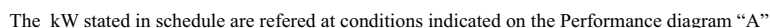


PERFORMANCE DIAGRAM



Technical characteristic herein mentioned are not binding and it can be modified without any notice.

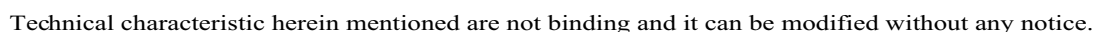
* = 4 with water circuit four ways



COOLERS TECHNICAL DATA

CORRECTION FACTOR (C) - PRESSURE DROP

PRESSURE DROP-Values in indicated the schedule V 30 mmq./s (~30 cSt)



Performance Diagrams CSW 3

DIAGRAM "A" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 1 Lt/min. each HP to be dissipated .

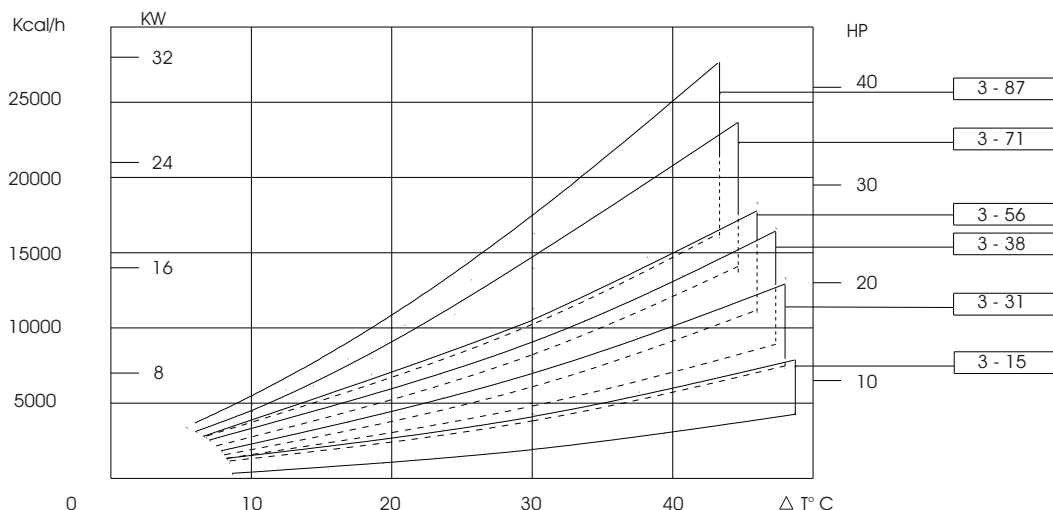


DIAGRAM "B" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 2 Lt/min. each HP to be dissipated .

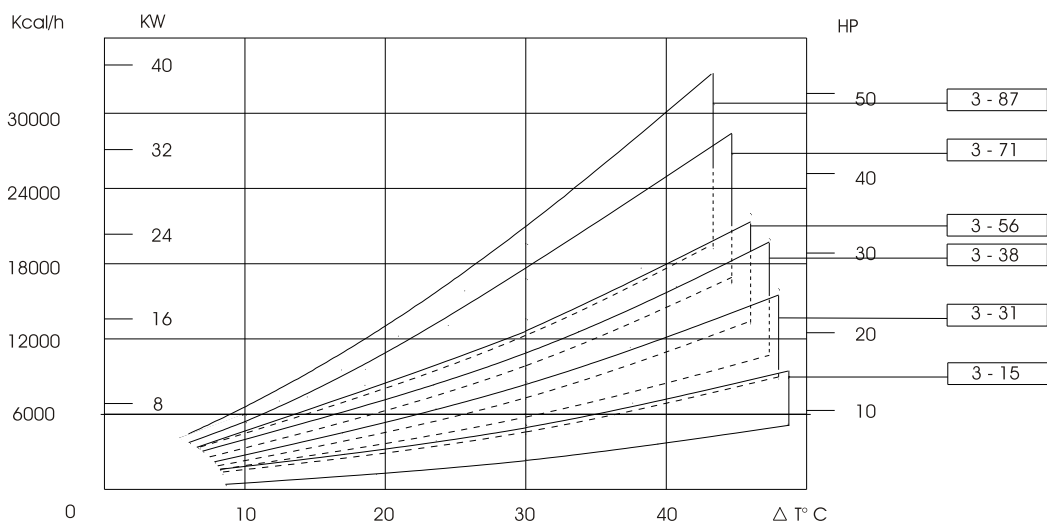
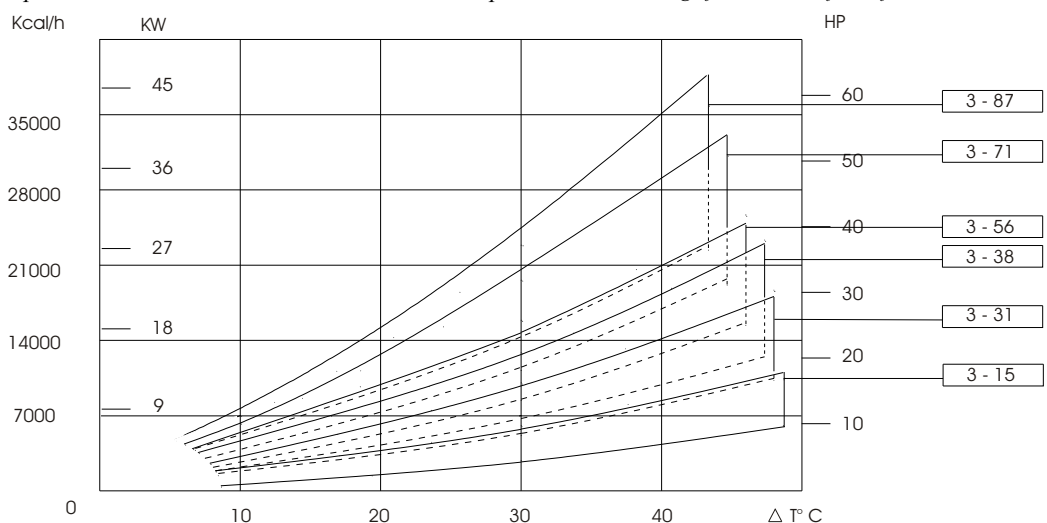


DIAGRAM "C" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 3 Lt/min. each HP to be dissipated .



CORRECTION FACTOR TEMP °C with oil at 55° C

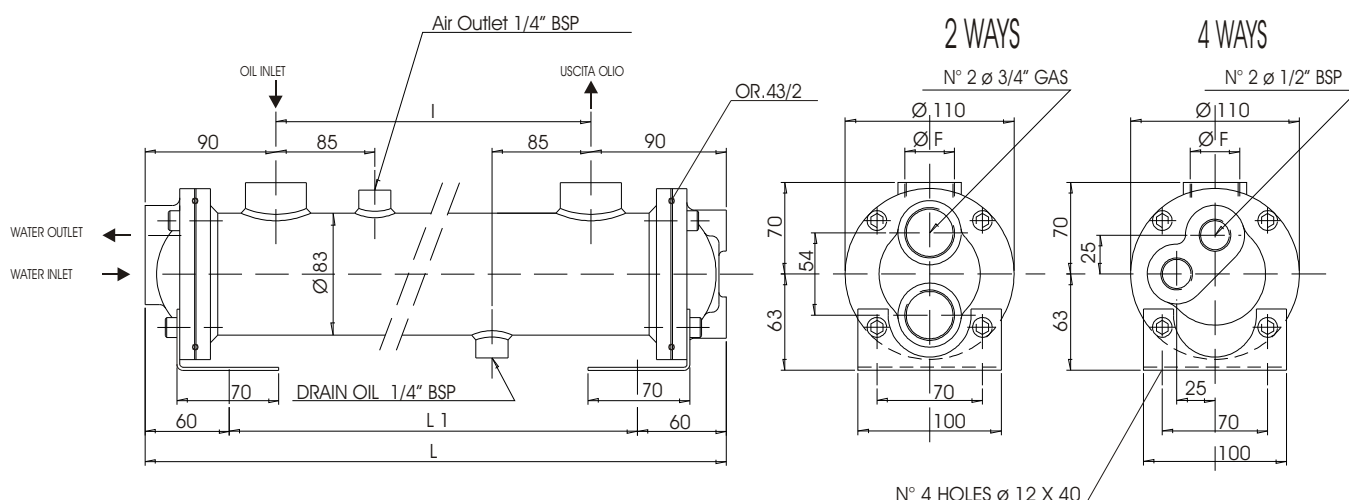
Water temp	20° C	25° C	30° C	35° C
Correction factor	1	0,88	0,75	0,65

Water/oil coolers series CSW 4

Code	Capacity	Oil flow	kW Dissipated	Weight	Over all dimensions			
		(L/min)	(With oil 55 °C and H ₂ O 20 °C)		F	I	L	L1
CSW4 - 31 - *	1.30	55 - 125	9 - 13	5.5	1-1/2"	310	490	370
CSW4 - 38 - *	1.50	55 - 125	10 - 15	7.0	1-1/2"	385	565	445
CSW4 - 56 - *	2.20	65 - 155	12 - 19	7.5	1-1/2"	560	740	620
CSW4 - 71 - *	2.50	80 - 185	15 - 23	9.3	1-1/2"	715	895	775
CSW4 - 87 - *	3.00	85 - 195	18 - 26	10.0	1-1/2"	870	1050	930

* = 2 with water circuit two ways

* = 4 with water circuit four ways



The kW stated in schedule are referred at conditions indicated on the Performance diagram "A"

Code	Shell	Covers	Seals	Pipes	Tubing plate	Deflector baffles
All	Fe 510.2	Al Si 13	NBR	CuDHP	C40	C37

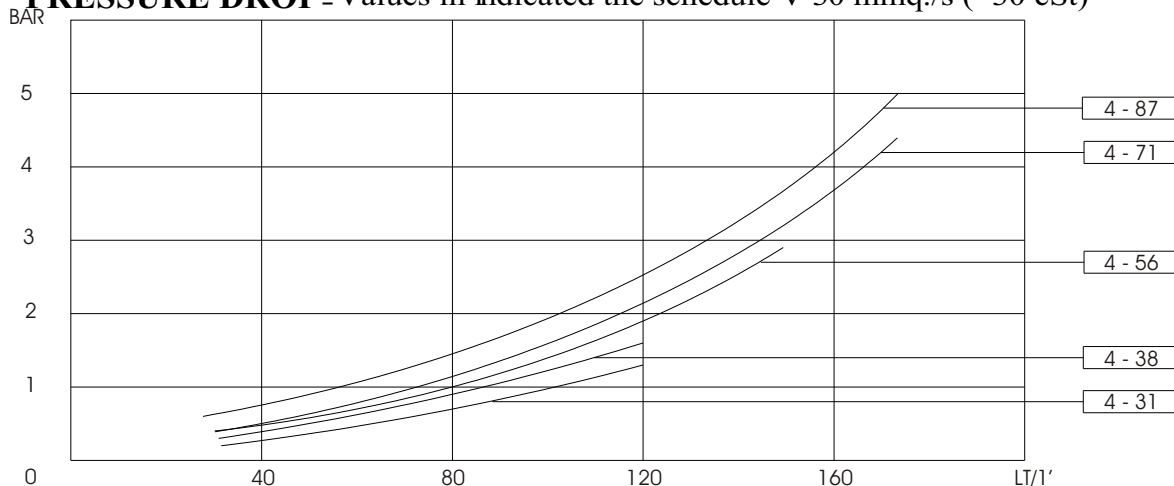
COOLERS TECHNICAL DATA

Max Working Pressure	: 12 bar
Test Pressure	- : 18 bar
Max Working Temperature	: + 99° C

CORRECTION FACTOR (C) - PRESSURE DROP

CSt	10	15	20	30	40	50	60	80	100	200	300
C	0,50	0,65	0,75	1,00	1,20	1,40	1,60	1,90	2,10	3,10	4,20

PRESSURE DROP - Values in indicated the schedule V 30 mmq./s (~30 cSt)



Technical characteristic herein mentioned are not binding and it can be modified without any notice.

Performance Diagrams CSW 4

DIAGRAM "A" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 1 Lt/min. each HP to be dissipated.

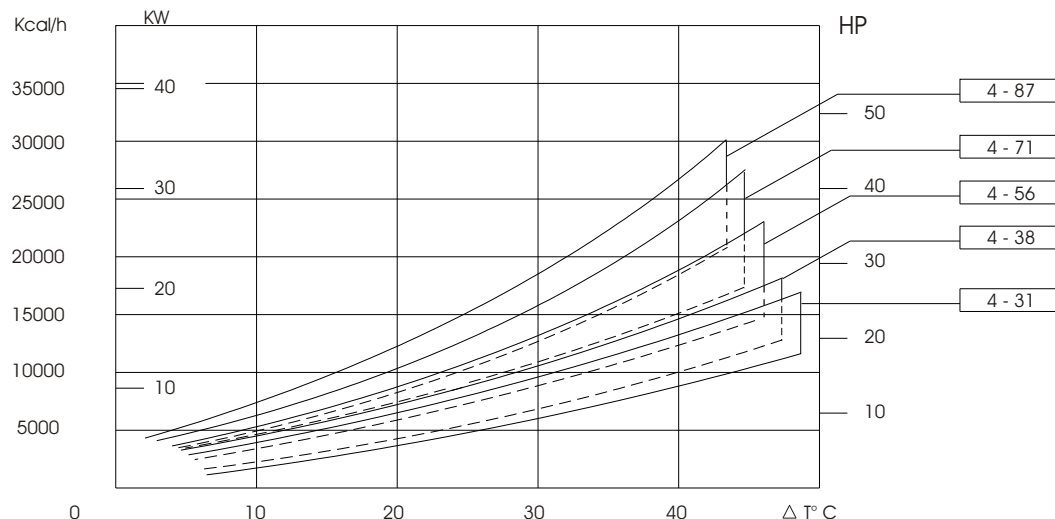


DIAGRAM "B" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 2 Lt/min. each HP to be dissipated.

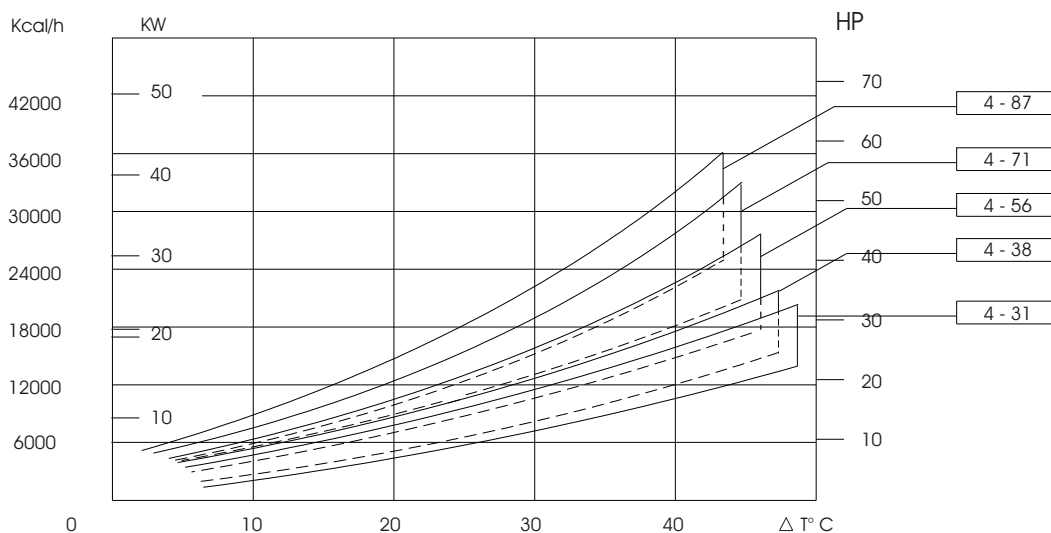
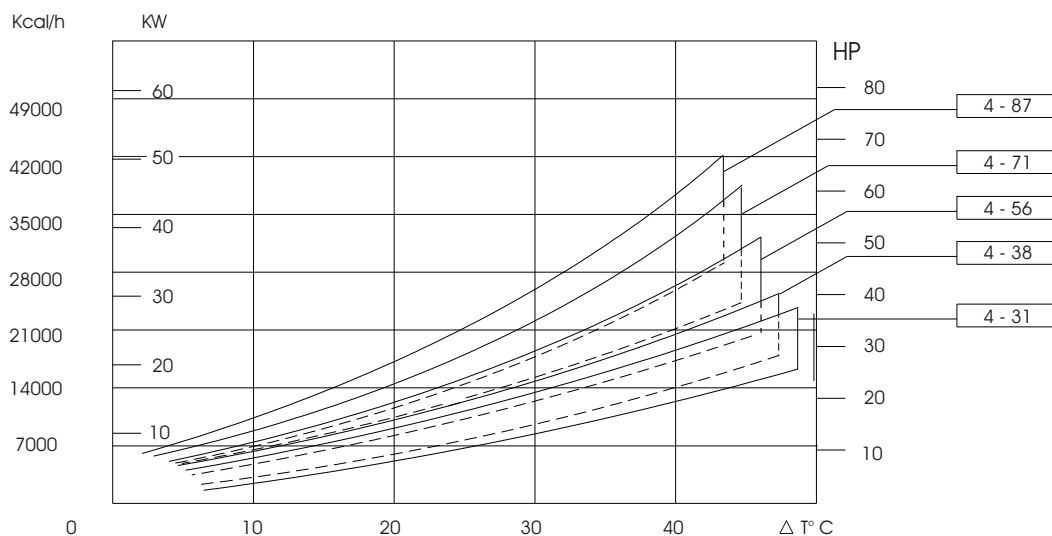


DIAGRAM "C" Water circuit cooler 4 ways

The dissipation, expressed in HP and indicated in schedule, takes place when:

Oil inlet reaches a temperature of 55°C and a viscosity of 30 cSt.

Water cooling of 20°C with a flow of 3 Lt/min. each HP to be dissipated.



CORRECTION FACTOR TEMP °C with oil at 55° C

Water temp	20° C	25° C	30° C	35° C
Correction factor	1	0,88	0,75	0,65



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