

CSE SERIES

*Air-Cooling liquid Chillers
 Centrifugal fans
 IP44 protection rating
 Suitable for INDOOR installation*



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Air-cooled liquid chillers CSE series, scroll compressors, R410A / R32 / R454B refrigerant, coaxial / shell and tube evaporator, condenser coil with copper tubes and aluminium finned fins, centrifugal fans with available air static pressure of 200Pa. Electrical feed 400V/3ph/50Hz. IP44 protection rating, chillers suitable for INDOOR installation. Inbuilt water storage tank and single pump P3 as standard.

Type of available evaporators:

CX = HITEMA coaxial evaporator, convoluted tube in tube exchanger (outer tube in carbon steel or stainless steel, inner tubes in copper) installed inside the water storage tank

ST = shell and tube evaporator, with high thickness copper tubes (0,41mm)

B-ES = stainless steel brazed plate evaporator

TECHNICAL DATA

PERFORMANCES		Model	030	038	045	061	075	100	130	160
NOMINAL COOLING CAPACITY	W 12°C/7°C @ 32°C (1)	kW	28,8	37,7	43,0	63,0	71,3	98,4	116,3	146,1
TOTAL NOMINAL ABSORBED POWER		kW	12,5	15,3	17,9	22,2	29,1	38,9	48,3	58,9
EER		kW/kW	2,58	2,87	2,73	3,21	2,68	2,70	2,66	2,69
SEPR (HT) (3)		-	4,59	5,11	5,07	5,21	4,80	4,86	4,75	4,78
NOMINAL WATER FLOW		m3/h	5,0	6,5	7,4	10,8	12,2	16,9	20,0	25,1
MECHANICAL MODE PRESSURE DROPS (4)		kPa	32	38	39	23	21	41	60	55
FRIGORIFIC SECTION										
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP		nr.	1/1/1	1/1/1	1/1/1	2/1/2	2/1/2	2/1/2	4/2/4	4/2/4
KIND OF EVAPORATOR		-	CX	CX	CX	CX	CX	CX	ST	ST
HYDRAULIC SECTION										
WATER FLOW RANGE (6)		m3/h	4,0+6,0	5,0+12,0	6,0+12,0	8,0+18,0	10,0+20,0	10,0+20,0	14,0+27,0	15,4+31,0
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (2)	kW	1,28	2,20	2,20	2,53	2,53	2,53	4,56	4,56
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	2,37	4,24	4,24	4,56	4,56	4,56	7,75	7,75
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	1,47	2,94	2,94	6,12	6,12	6,12	10,20	10,20
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	2,32	5,83	5,83	10,40	10,40	10,40	17,40	17,40
HYDRAULIC CONNECTIONS (THREADED / FLANGED)		BSP / DN	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	DN65	DN65
TANK VOLUME (5)		dm³	270	270	270	410	410	410	390	390
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	12	12	12	19	19	19	19	19
FAN SECTION (CENTRIFUGAL)										
FANS		nr.	2	2	2	3	3	2	3	3
FAN SPEED REGULATION		-	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	INVERTER	INVERTER
MAXIMUM FANS ABSORBED POWER		kW	2,20	2,20	2,20	3,30	3,30	6,00	9,00	9,00
MAXIMUM FANS ABSORBED CURRENT		A	9,80	9,80	9,80	14,70	14,70	24,80	37,20	37,20
TOTAL AIR FLOW		m3/h	13000	13000	13000	19500	19500	30000	45000	45000
TOTAL ELECTRIC DATA										
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	32,3	38,5	44,0	59,5	68,3	95,8	125,5	143,0
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	141,4	144,2	178,2	178,4	183,8	284,4	244,3	258,5
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	NA	NA	NA	150,6	155,8	239,4	216,5	230,5
NOISE DATA										
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	54,0	55,0	55,2	55,8	56,4	60,9	62,7	63,1
SOUND PRESSURE FOR LOW NOISE CONFIGURATION (OPTION LN) (6) (7)		dB(A)	53,7	54,4	54,5	55,4	55,5	60,0	62,6	62,7
DIMENSIONS AND WEIGHT										
LENGTH		mm	1610	1610	1610	2220	2220	2220	3355	3355
WIDTH		mm	860	860	860	1100	1100	1100	1305	1305
HEIGHT		mm	1860	1860	1860	1900	1900	2350	2350	2350
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)		kg	445	465	495	770	800	990	1315	1365
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)		kg	720	740	770	1190	1220	1410	1740	1800

The manufacturer reserves the right to modify specifications without notice.

Last update: 22/07/2021
Revision: 02-2021

Data referred to:

(1) Data referred to inlet/outlet water temperature = +12/+7 °C, ambient temperature = +32°C, fluid = Water

(2) Available pressure can be calculated from Hitema Online Selection Software

(3) SEPR: data comply with the European Regulation (EU) 2016/2281, referring to high temperature process chillers

(4) Pressure drops taken in account: evaporator, valves, piping

(5) Data referred to standard chiller configuration as indicated in frigorific section, with different evaporator this data can change

(6) Data referred to standard chiller configuration WP (single pump P3)

(7) Sound pressure level referred to measures according to normative ISO3744, pressure level at distance of 10 m, referred to free field on reflecting surface

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TECHNICAL DATA

PERFORMANCES		Model	185	230	280	340	370	
NOMINAL COOLING CAPACITY	W 12°C/7°C @ 32°C (1)	kW	174,0	228,3	278,8	324,4	362,5	
TOTAL NOMINAL ABSORBED POWER		kW	65,1	86,7	109,4	123,5	140,8	
EER		kW/kW	2,87	2,91	2,76	2,82	2,78	
SEPR (HT) (3)		-	5,15	5,25	4,95	5,06	5,02	
NOMINAL WATER FLOW		m3/h	29,9	39,2	47,9	55,7	62,3	
MECHANICAL MODE PRESSURE DROPS (4)		kPa	62	61	62	53	58	
FRIGORIFIC SECTION								
COMPRESSORS / REFRIGERATING CIRCUITS / PARTITION STEP		nr.	4/2/4	4/2/4	4/2/4	4/2/4	4/2/4	
KIND OF EVAPORATOR		-	ST	ST	ST	ST	ST	
HYDRAULIC SECTION								
WATER FLOW RANGE (6)		m3/h	21,0+40,0	25,0+46,0	31,0+58,0	38,0+70,0	45,0+80,0	
MAXIMUM PUMP ABSORBED POWER (WP OR OPTION DP)	P3 (2)	kW	4,56	8,30	8,30	8,30	10,20	
MAXIMUM PUMP ABSORBED CURRENT (WP OR OPTION DP)		A	7,75	14,10	14,10	14,10	17,40	
MAXIMUM PUMP ABSORBED POWER (OPTION PH OR DPH)	P5 (2)	kW	10,20	16,22	16,22	16,22	16,22	
MAXIMUM PUMP ABSORBED CURRENT (OPTION PH OR DPH)		A	17,40	26,60	26,60	26,60	26,60	
HYDRAULIC CONNECTIONS (THREADED / FLANGED)		BSP / DN	DN65	DN80	DN100	DN100	DN100	
TANK VOLUME (5)		dm³3	390	500	500	500	500	
EXPANSION VESSEL NUMBER x VOLUME (OPTION XV)		liters	19	19	19	19	19	
FAN SECTION (CENTRIFUGAL)								
FANS		nr.	3	4	5	6	6	
FAN SPEED REGULATION		-	INVERTER	INVERTER	INVERTER	INVERTER	INVERTER	
MAXIMUM FANS ABSORBED POWER		kW	9,00	12,00	15,00	18,00	18,00	
MAXIMUM FANS ABSORBED CURRENT		A	37,20	49,60	62,00	74,40	74,40	
TOTAL AIR FLOW		m3/h	45000	60000	75000	90000	90000	
TOTAL ELECTRIC DATA								
MAXIMUM ABSORBED CURRENT (F.L.A) (6)		A	165,0	209,5	254,5	296,3	329,0	
MAXIMUM PEAK CURRENT (L.R.A) (6)		A	309,0	398,0	481,9	547,0	579,7	
MAXIMUM PEAK CURRENT WITH SOFT START (OPTION SF) (L.R.A) (6)		A	274,2	353,0	427,5	485,0	517,7	
NOISE DATA								
SOUND PRESSURE FOR STANDARD CONFIGURATION (6) (7)		dB(A)	63,2	65,0	66,4	66,8	66,8	
SOUND PRESSURE FOR LOW NOISE CONFIGURTION (OPTION LNJ) (6) (7)		dB(A)	62,8	64,0	64,7	65,3	65,4	
DIMENSIONS AND WEIGHT								
LENGTH		mm	4355	5350	5350	6350	6350	
WIDTH		mm	1305	1305	1305	1305	1305	
HEIGHT		mm	2350	2350	2350	2350	2350	
WEIGHT EMPTY FOR STANDARD CONFIGURATION (5) (6)		kg	1730	2245	2395	2725	2910	
WEIGHT OPERATIVE FOR STANDARD CONFIGURATION (5) (6)		kg	2170	2800	2955	3305	3510	

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