

COM40

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COM40: Hydra Range 15 – 44kW

Air-cooled Liquid Chillers
for Process cooling

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Hydra Range



- High efficiency, air-cooled general utility chillers for outdoor installation
- 8 models based on capacity: 15-44kW
- Single scroll on/off compressors
- Brazed plate heat exchangers
- Refrigerant R410A (R454b Optional)
- EC fans
- Compact design, easy to install & maintain
- Highly versatile & adaptable with wide range of accessories
- ErP 2021 compliant



All units optimised from +23°C to -10°C dependent on application and ΔT °K. Please contact us for model selection guidance.



PRICE LIST	Ex-Works, commissioning & VAT	09/2022
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Cooling capacities: 15 - 43 kW

UNIT RANGE	HYDRA
	R410A (R454b Optional)
Description	MONO SCROLL ON-OFF COMPRESSOR AIR COOLED CHILLER FOR OUTDOOR USE
Application (EU) 2016/2281	HT Process Chiller

HYDRA		051A	061A	081A	091A	101A	121A	131A	151A
Cooling capacity (kW)		14,4	16,7	20,4	23,9	27,9	32	37	43,4
EER (A35/W7)		3,37	3,29	3,33	3,33	3,38	3,46	3,36	3,23
SEPR		6,21	5,55	5,46	5,27	5,32	5,41	5,43	5,20
Supply voltage (V-ph-Hz)		400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Dimensions (mm)		1590x780 x1300(h)	1590x780 x1300(h)	1590x780 x1300(h)	1590x780 x1300(h)	1990x900 x1550(h)	1990x900 x1550(h)	1990x900 x1550(h)	1990x900 x1550(h)
Weight _without accessories_(Kg)		217	225	235	280	345	367	382	397
BASIC UNIT (1)	£ ex VAT	£6,200	£6,400	£6,875	£7,900	£9,000	£9,520	£10,350	£11,050
Items included as standard	Electronic expansion valve / cond. Coils protection guards / Compressors overload thermal protections / Compressors crankcase heaters / Compressors cabinet separated by the condensing air flow section / Low water flow protection device / Phase sequence relay / Mains isolator / Modulating EC fans								

Accessory options (fitted within chiller body)		Hydronic section including: Expansion vessel / safety pressure valve (6 Bar) / Steel made piping / Victaulic joints							
HYDRA		051A	061A	081A	091A	101A	121A	131A	151A
1 standard pressure.pump	£ ex VAT	£707	£707	£707	£722	£770	£785	£785	£785
1 high pressure pump	£ ex VAT	£850	£850	£850	£1080	£1080	£1100	£1100	£1100
1 std press pump. + buffer tank	£ ex VAT	£1195	£1195	£1195	£1235	£1275	£1350	£1350	£1350
1 high press pump. + buffer tank	£ ex VAT	£1335	£1335	£1335	£1590	£1690	£1680	£1680	£1680
Remote control panel	£ ex VAT	£425	£425	£425	£425	£425	£425	£425	£425

Other Accessories available (POA)	Advanced controller for additional user interrogation / Trace Heating / Current overload protection / Crankcase heater / Condenser fully Ecofin painted / Compressor soft starter/ RS485 Modbus interface module/Condenser coil protection guard/power factor correction to 0.95
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Technical Specifications: HYDRA Chillers

MODEL	HYDRA	051-A	061-A	081-A	091-A
Fluid - In/out Temp.	Water 12/7°C				
Ext. Source Temp.	Air 35 °C				
Cooling capacity	kW	14,4	16,7	20,4	23,9
Total power input	kW	4,3	5,1	6,1	7,2
EER (EN 14511-2018) *		3,37	3,29	3,33	3,33
Fluid In/out Temp.	Water with/ 30% glycol 0/-5°C				
Ext. Source Temp.	Air 35 °C				
Cooling capacity	kW	9,3	10,8	13,4	15,8
Total power input	kW	4,1	4,7	5,7	6,7
EER (EN 14511-2018)		2,24	2,30	2,32	2,35
Min. working fluid leaving temp.	°C	-10			
Efficiency Indices					
SEPR		6,21	5,55	5,46	5,27
Main data					
Refrigerant		R410A	R410A	R410A	R410A
Scroll Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
Capacity steps	n°	1	1	1	1
Noise power level Lw***	dB(A)	73,0	73,5	74,3	74,3
pressure level Lp***	dB(A)	41,5	42,0	42,9	42,9
Main supply voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50
Max power input	kW	7,7	8,2	9,5	10,9
Max current input	A	12,6	16,6	17,8	19,8
Starting current	A	68,7	76,6	102,6	129,6
User side heat exchanger ****					
Brazed plate heat exch	n°	1	1	1	1
Fluid flow	l/s	0,69	0,80	0,97	1,14
Pressure drops	kPa	11,60	10,30	11,00	11,60
Fan section ****					
EC Axial fans	n°/type	1	1	1	2
Total air flow	m³/s	3,11	3,10	2,98	2,97
Fan speed	min-1	1010	1010	1010	1010
Fans total power input	KW	0,48	0,48	0,51	0,51
Fans total current input	A	0,82	0,82	0,86	0,86
Dimensions and weight (without accessories)					
Length	mm	1590	1590	1590	1590
Width	mm	780	780	780	780
Height	mm	1300	1300	1300	1300
Empty weight	Kg	217	225	235	280
User side piping connections	"	1-1/4	1-1/4	1-1/4	1-1/4
Coupling type		Victaulic	Victaulic	Victaulic	Victaulic

USER SIDE HYDRONIC KIT available versions

1 pump std	kPa	165	155	134	160
1 pump HP	kPa	255	250	245	240
1 pump std + buffer tank	kPa	165	155	134	160
1 pump HP + buffer tank	kPa	255	250	245	240

* According to EN14511

*** Sound power according to ISO3744.

Sound pressure at 10 meters in free field

**** Performance refers to full load running (A35/W12-7 °C)





Technical Specifications: HYDRA Chillers

MODEL	HYDRA	101A	121A	131A	151A
Fluid In/out Temp.	Water 12/7°C				
Ext. Source Temp.	Air 35°C				
Cooling capacity	kW	27,9	31,0	35,6	41,0
Total power input	kW	8,3	9,0	10,6	12,7
EER (EN 14511-2018) *		3,38	3,46	3,36	3,23
Fluid - In/out Temp.	Water with 30% glycol 0/-5°C				
Ext. Source Temp.	Air 35°C				
Cooling capacity	kW	18,5	20,4	23,5	27,3
Total power input	kW	7,6	8,3	9,8	11,6
EER (EN 14511-2018)		2,38	2,45	2,39	2,32
Min fluid leaving temp.	°C	-10			
Efficiency indices					
SEPR		5,32	5,41	5,43	5,20
Main data					
Refrigerant		R410A	R410A	R410A	R410A
Scroll Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
Capacity steps	n°	1	1	1	1
Noise power level Lw***	dB(A)	77,0	77,0	78,0	78,8
Noise pressure level Lp***	dB(A)	45,4	45,4	46,4	47,2
Main supply voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50
Max power input	kW	12,6	14,0	16,6	18,9
Max current input	A	23,2	26,6	34,2	37,2
Starting current	A	140,6	119,6	143,2	177,2
User side heat exchanger ****					
Brazed plate heat exch	n°	1	1	1	1
Medium flow	l/s	1,34	1,48	1,70	1,96
Pressure drops	kPa	12,30	12,60	14,20	15,43
Fan section ****					
EC Axial fans	n°/type	1	1	2	2
Total air flow	m³/s	3,21	3,15	6,19	6,17
Fan speed	min-1	1010	1010	1010	1010
Fans total power input	KW	0,45	0,46	0,97	0,97
Fans total current input	A	0,76	0,78	1,65	1,65
Dimensions and weight (without accessories)					
Length	mm	1990	1990	1990	1990
Width	mm	900	900	900	900
Height	mm	1550	1550	1550	1550
Empty weight	Kg	345	367	382	397
User side piping connections	"	1-1/2	1-1/2	1-1/2	1-1/2
Coupling type		Victaulic	Victaulic	Victaulic	Victaulic

USER SIDE HYDRONIC KIT available versions

1 pump std	kPa	148	142	125	98
1 pump HP	kPa	232	224	214	180
1 pump std + buffer tank	kPa	148	142	125	98
1 pump HP + buffer tank	kPa	232	224	214	180

* According to EN14511

*** Sound power according to ISO3744.

Sound pressure at 10 meters in free field

**** Performance refers to full load running (A35/W12-7 °C)



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