

# STOCK PROGRAM YLAA Air-Cooled Scroll Chillers



Last Update: October 2021



# YLAA Stock Program Air-cooled scroll compressor chiller

## Cooling capacities from 294 kW to 531 kW

For other models and capacities consult the General Catalogue





Perfect selection of **YORK YLAA TEMPO** chillers in stock for immediate shipment.

Utilising scroll type compressors and microchannel condenser coil technology the **YLAA** delivers premium efficiency for all air conditioning applications.

**YLAA** chillers are a self-contained cooling solution that is light-weight and compact for convenient installation on the ground or on building rooftops.



The TEMPO delivers energy efficiency levels that surpasses Ecodesign Tier 2 requirements. Aluminium microchannel condenser coil technology is one reason for this premium efficiencies.











# Options available on stock models (depending on model)

- R454B and R410A models
- Variable EC and VSD fans
- Service Connected Ready
- Electronic expansion valve
- Low ambient temperature kit
- Dual pressure relief valves
- V-Guard panel
- Environmental guard coating
- Compressor sound blankets
- Vibration isolators
- Victualic coupling
- Flow Switch



Ultra quiet operation and outstanding part load efficiency can be obtained through variable speed EC fans and a compressor accoustic blankets.

#### YORK® YLAA AIR-COOLED STOCK CHILLERS

Model	YLAA0301	YLAA0301	YLAA0392	YLAA0392	YLAA0517	YLAA0517	YLAA0517
Cooling capacity (kW)	294	298	373	378	518	526	531
SEER	4.84	4.83	4.74	4.74	5.15	5.14	5.24
ns,c (according to EN14825-2018)	190.53	190.31	186.78	186.58	203.09	202.79	206.66
Sound Power (dBA)	92	92	93	93	94	94	87
Number of Fans	5	5	6	6	8	8	8
Type of Fans	VSD	VSD	VSD	VSD	VSD	VSD	EC
Total Air Flow (m³/s)	35	35	42	42	57	57	51
Refrigerant Type	R454B	R410A	R454B	R410A	R454B	R410A	R454B

Check with your YORK Distributor, Johnson Controls Branch or Sales Agent for stock availability.

If you do not see the chiller you need in stock, made-to-order chillers are available.

Reservation and Purchase of chillers under this stock program is governed by the principle rule of **first-come**, **first-served basis**.

Please contact your JCI representative for further information.

## YLAA0301 - R454B - VSD fan

#### Unit Type and Size

ID	YLAA0301
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	13 / 43 / 58 / 86 / 100

#### **Technical Data**

Refrigerant Type		R454B
Net Cooling Capacity (according to EN14511-2018)	kW	294
Net Total Power Input (according to EN14511-2018)	kW	97.3
Net EER (according to EN14511-2018)	kW/kW	3.02
Gross Cooling Capacity	kW	294
Gross Total Power Input	kW	96.5
Gross EER	kW/kW	3.05
ns,c (according to EN14825-2018)	%	190.53
SEER	kW/kW	4.84
Sound Power	dBA	92

#### **Evaporator**

	Plate Heat Exchanger
L	33
	Water
°C	12
°C	7
°C	4.5 / 3.7
L/s	13.992
kPa	25.7
kPa	14.6
kPa	8.2
kPa	48.5
m²K/kW	0.018
in	3"
L/s	6.3
L/s	25.2
	°C °C L/s kPa kPa kPa kPa m²K/kW in L/s

#### Condenser (Air Cooled)

condenser (/ iii cooled)		
Ambient Air Dry Bulb Temperature	°C	35
Ambient Air Wet Bulb Temperature	°C	24
Condensing Temperature	°C	48.7 / 50.7
Number of Fans		5
Altitude	m	0
Total Air Flow	m³/s	35
Total Fan Power	kW	8.4

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	181
Max. Current	А	218
Unit Short Circuit Current Withstand	[kA]	50
Compressor Starting Current(s)	А	172 / 172 / 172 / 326 / 326
Maximum Instantaneous Current	А	460

#### Physical Data

i flysical Data		
Shipping Weight	kg	2214
Operating Weight	kg	2247
Refrigerant Charge	kg	32.2
Frame Length	mm	3690
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R454B	GWP CO2 = 1	466

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614 Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

Outside the scope of AHRI Air-Cooled Water-Chilling Packages Using Vapor Compression Cycle Certification Program, but is rated in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Compliant with the requirements of the LEED Energy and Atmosphere Enhanced Refrigerant Management Credit (EAc4).

JCI declares 0 degree temperature pitch due to using engineering simulation models of actual performance and our software allows ratings at .1 degree increments.

JCI participates in the ECP program: Liquid Chilling Packages and Heat Pumps (LCP-HP). Check ongoing validity of certificate: www.eurovent-certification.com



YLAA0301 - R410A - VSD fan

#### Unit Type and Size

ID	YLAA0301	
Number of Compressors	5	
Compressor Type	Scroll - Hermetic	
Number of Compressor Circuits	2	
Capacity Control	13 / 43 / 58 / 86 / 100	

#### **Technical Data**

Refrigerant Type		R410A
	LAM	
Net Cooling Capacity (according to EN14511-2018)	kW	298
Net Total Power Input (according to EN14511-2018)	kW	101
Net EER (according to EN14511-2018)	kW/kW	2.95
Gross Cooling Capacity	kW	299
Gross Total Power Input	kW	100.2
Gross EER	kW/kW	2.98
ns,c (according to EN14825-2018)	%	190.31
SEER	kW/kW	4.83
Sound Power	dBA	92

#### **Evaporator**

Evaporator Type		Plate Heat Exchanger
Fluid Volume	L	33
Fluid Type		Water
Entering Liquid Temperature	°C	12
Leaving Liquid Temperature	°C	7
Total Flow Rate	L/s	14.205
Total Pressure Drop	kPa	26.5
Fouling Factor	m²K/kW	0.018
Fluid Connection Diameter	in	3"
Min Fluid Flow Rate	L/s	6.3
Max Fluid Flow Rate	L/s	25.2

#### Condenser (Air Cooled)

condenser (/ III cooled)			
Ambient Air Dry Bulb Temperature	°C	35	
Ambient Air Wet Bulb Temperature	°C	24	
Number of Fans		5	
Altitude	m	0	
Total Air Flow	m³/s	35	
Total Fan Power	kW	8.4	

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	181
Max. Current	А	218
Unit Short Circuit Current Withstand	[kA]	50
Maximum Instantaneous Current	А	460

#### Physical Data

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Shipping Weight	kg	2214
Operating Weight	kg	2247
Refrigerant Charge	kg	52.6
Frame Length	mm	3614
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R410A	GWP CO2 = 1	2088

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614

Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

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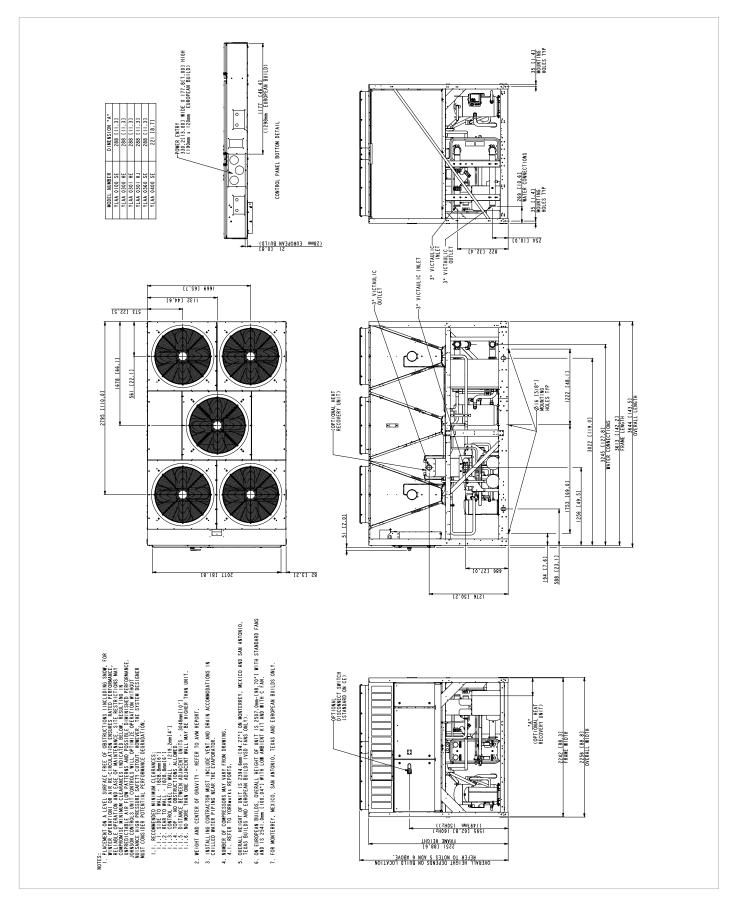
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## Dimensions and Hydraulic Connections

YLAA0301 - R454B - VSD fan YLAA0301 - R410A - VSD fan



YLAA0392 - R454B - VSD fan

#### Unit Type and Size

71	
ID	YLAA0392
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	22 / 41 / 59 / 83 / 100

#### **Technical Data**

Refrigerant Type		R454B
Net Cooling Capacity (according to EN14511-2018)	kW	373
Net Total Power Input (according to EN14511-2018)	kW	125.4
Net EER (according to EN14511-2018)	kW/kW	2.97
Gross Cooling Capacity	kW	373
Gross Total Power Input	kW	124.3
Gross EER	kW/kW	3
ns,c (according to EN14825-2018)	%	186.78
SEER	kW/kW	4.74
Sound Power	dBA	93

#### **Evaporator**

Evaporator Type		Plate Heat Exchanger
Fluid Volume	L	50
Fluid Type		Water
Entering Liquid Temperature	°C	12
Leaving Liquid Temperature	°C	7
EvaporatingTemperature	°C	3.7 / 4
Total Flow Rate	L/s	17.741
Total Pressure Drop	kPa	33.8
Fouling Factor	m²K/kW	0.018
Fluid Connection Diameter	in	3"
Min Fluid Flow Rate	L/s	8.706
Max Fluid Flow Rate	L/s	33.122

#### Condenser (Air Cooled)

Ambient Air Dry Bulb Temperature	°C	35
Ambient Air Wet Bulb Temperature	°C	24
Condensing Temperature	°C	50.2 / 51.1
Number of Fans		6
Altitude	m	0
Total Air Flow	m³/s	42
Total Fan Power	kW	10.1

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	239
Max. Current	А	289
Unit Short Circuit Current Withstand	[kA]	50
Compressor Starting Current(s)	А	254 / 254 / 254 / 326 / 326
Maximum Instantaneous Current	А	518

#### **Physical Data**

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Shipping Weight	kg	2594
Operating Weight	kg	2644
Refrigerant Charge	kg	42.8
Frame Length	mm	3690
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R454B	GWP CO2 = 1	466

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614

Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

Outside the scope of AHRI Air-Cooled Water-Chilling Packages Using Vapor Compression Cycle Certification Program, but is rated in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

Compliant with the requirements of the LEED Energy and Atmosphere Enhanced Refrigerant Management Credit (EAc4).

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### YLAA0392 - R410A - VSD fan

#### Unit Type and Size

<b>71</b>	
ID	YLAA0392
Number of Compressors	5
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	22 / 41 / 59 / 83 / 100

#### **Technical Data**

Refrigerant Type		R410A
Net Cooling Capacity (according to EN14511-2018)	kW	378
Net Total Power Input (according to EN14511-2018)	kW	130.2
Net EER (according to EN14511-2018)	kW/kW	2.91
Gross Cooling Capacity	kW	379
Gross Total Power Input	kW	129
Gross EER	kW/kW	2.93
ns,c (according to EN14825-2018)	%	186.58
SEER	kW/kW	4.74
Sound Power	dBA	93

#### Evaporator

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Evaporator Type		Plate Heat Exchanger
Fluid Volume	L	50
Fluid Type		Water
Entering Liquid Temperature	°C	12
Leaving Liquid Temperature	°C	7
EvaporatingTemperature	°C	3.7 / 4
Total Flow Rate	L/s	18.011
Total Pressure Drop	kPa	34.7
Fouling Factor	m²K/kW	0.018
Fluid Connection Diameter	in	3"
Min Fluid Flow Rate	L/s	8.706
Max Fluid Flow Rate	L/s	33.122

#### Condenser (Air Cooled)

Ambient Air Dry Bulb Temperature	°C	35
Ambient Air Wet Bulb Temperature	°C	24
Condensing Temperature	°C	50.2 / 51.1
Number of Fans		6
Altitude	m	0
Total Air Flow	m³/s	42
Total Fan Power	kW	10.1

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	A	239
Max. Current	A	289
Unit Short Circuit Current Withstand	[kA]	50
Compressor Starting Current(s)	A	254 / 254 / 254 / 326 / 326
Maximum Instantaneous Current	A	518

#### **Physical Data**

Shipping Weight	kg	2594
Operating Weight	kg	2644
Refrigerant Charge	kg	57
Frame Length	mm	3690
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R410A	GWP CO2 = 1	2088

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614

Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

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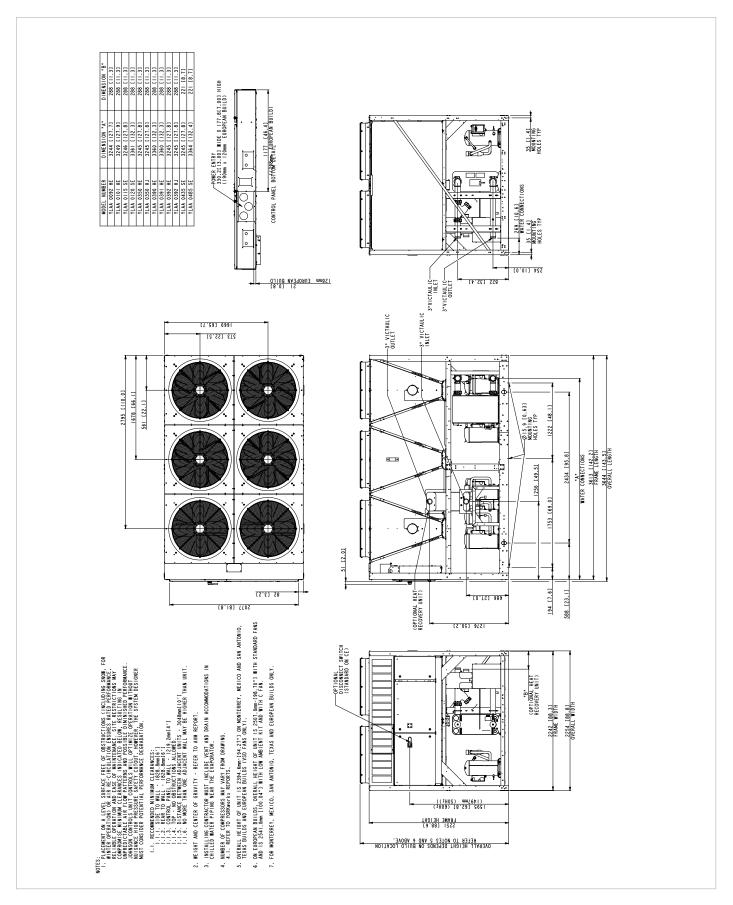
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## **Dimensions and Hydraulic Connections**

YLAA0392 - R454B - VSD fan YLAA0392 - R410A - VSD fan



## YLAA0517 - R454B - EC fan

#### Unit Type and Size

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ID	YLAA0517
Number of Compressors	6
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	16 / 33 / 50 / 67 / 84 / 100

#### **Technical Data**

Refrigerant Type		R454B
Net Cooling Capacity (according to EN14511-2018)	kW	531
Net Total Power Input (according to EN14511-2018)	kW	171.3
Net EER (according to EN14511-2018)	kW/kW	3.1
Gross Cooling Capacity	kW	531
Gross Total Power Input	kW	169.5
Gross EER	kW/kW	3.13
ns,c (according to EN14825-2018)	%	206.66
SEER	kW/kW	5.24
Sound Power	dBA	87

#### Evaporator

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Evaporator Type		Plate Heat Exchanger
Fluid Volume	L	54
Fluid Type		Water
Entering Liquid Temperature	°C	12
Leaving Liquid Temperature	°C	7
EvaporatingTemperature	°C	3.3 / 3.3
Total Flow Rate	L/s	25.278
Evap Pressure Drop	kPa	41.2
Strainer Pressure Drop	kPa	12.5
Extension Kit Pressure Drop	kPa	29
Total Pressure Drop	kPa	82.7
Fouling Factor	m²K/kW	0.018
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	L/s	12.6
Max Fluid Flow Rate	L/s	41

#### Condenser (Air Cooled)

Ambient Air Dry Bulb Temperature	°C	35
Ambient Air Wet Bulb Temperature	°C	24
Condensing Temperature	°C	50.5 / 50.5
Number of Fans		8
Altitude	m	0
Total Air Flow	m³/s	51
Total Fan Power	kW	11.8

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	313
Max. Current	А	382
Unit Short Circuit Current Withstand	[kA]	50
Compressor Starting Current(s)	А	326 / 326 / 326 / 326 / 326
Maximum Instantaneous Current	А	591

#### Physical Data

T Hysical Data		
Shipping Weight	kg	3616
Operating Weight	kg	3669
Refrigerant Charge	kg	52.5
Frame Length	mm	4807
Frame Width	mm	2242
Frame Height	mm	2541
Global Warming Potential R454B	GWPCO2 = 1	466

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614

Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

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Compliant with the requirements of the LEED Energy and Atmosphere Enhanced Refrigerant Management Credit (EAc4).

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YLAA0517 - R454B - VSD fan

#### Unit Type and Size

ID	YLAA0517
Number of Compressors	6
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	16 / 34 / 51 / 68 / 84 / 100

#### **Technical Data**

Refrigerant Type		R454B
Net Cooling Capacity (according to EN14511-2018)	kW	518
Net Total Power Input (according to EN14511-2018)	kW	172.7
Net EER (according to EN14511-2018)	kW/kW	3
Gross Cooling Capacity	kW	518
Gross Total Power Input	kW	171
Gross EER	kW/kW	3.03
ns,c (according to EN14825-2018)	%	203.09
SEER	kW/kW	5.15
Sound Power	dBA	94

#### **Evaporator**

Evaporator Type		Plate Heat Exchanger
Fluid Volume	L	54
Fluid Type		Water
Entering Liquid Temperature	°C	12
Leaving Liquid Temperature	°C	7
Total Flow Rate	L/s	24.657
Total Pressure Drop	kPa	39.3
Fouling Factor	m²K/kW	0.018
Fluid Connection Diameter	in	4"
Min Fluid Flow Rate	L/s	12.6
Max Fluid Flow Rate	L/s	41

#### Condenser (Air Cooled)

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Ambient Air Dry Bulb Temperature	°C	35
Ambient Air Wet Bulb Temperature	°C	24
Number of Fans		8
Altitude	m	0
Total Air Flow	m³/s	57
Total Fan Power	kW	13.4

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	323
Max. Current	А	392
Unit Short Circuit Current Withstand	[kA]	50
Maximum Instantaneous Current	А	601

#### **Physical Data**

Shipping Weight	kg	3688
Operating Weight	kg	3741
Refrigerant Charge	kg	78.5
Frame Length	mm	4807
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R454B	GWP CO2 = 1	466

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard
Sound Data in accordance with ISO 9614
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YLAA0517 - R410A - VSD fan

#### Unit Type and Size

21	
ID	YLAA0517
Number of Compressors	6
Compressor Type	Scroll - Hermetic
Number of Compressor Circuits	2
Capacity Control	16 / 34 / 51 / 68 / 84 / 100

#### **Technical Data**

Refrigerant Type		R410A
Net Cooling Capacity (according to EN14511-2018)	kW	526
Net Total Power Input (according to EN14511-2018)	kW	179.3
Net EER (according to EN14511-2018)	kW/kW	2.93
Gross Cooling Capacity	kW	526
Gross Total Power Input	kW	177.6
Gross EER	kW/kW	2.96
ns,c (according to EN14825-2018)	%	202.79
SEER	kW/kW	5.14
Sound Power	dBA	94

#### **Evaporator**

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#### Condenser (Air Cooled)

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Ambient Air Dry Bulb Temperature	°C	35	
Ambient Air Wet Bulb Temperature	°C	24	
Condensing Temperature	°C	50.5 / 50.5	
Number of Fans		8	
Altitude	m	0	
Total Air Flow	m³/s	57	
Total Fan Power	kW	13.4	

#### **Electrical Data**

Nominal Voltage / Voltage Limits		400-3-50 / 360-440
Nominal Current	А	323
Max. Current	А	392
Unit Short Circuit Current Withstand	[kA]	50
Compressor Starting Current(s)	А	326 / 326 / 326 / 326 / 326 / 326
Maximum Instantaneous Current	Α	601

#### **Physical Data**

•		
Shipping Weight	kg	3688
Operating Weight	kg	3741
Refrigerant Charge	kg	70
Frame Length	mm	4807
Frame Width	mm	2242
Frame Height	mm	2393
Global Warming Potential R410A	GWP CO2 = 1	2088

Software Version: YW21.02a

Supply cable(s): 3 phases + Earth (No Neutral)

Performance Data in accordance with Eurovent Standard

Sound Data in accordance with ISO 9614

Min flow rate is for chillers using water. For glycol chillers please contact the application engineering team.

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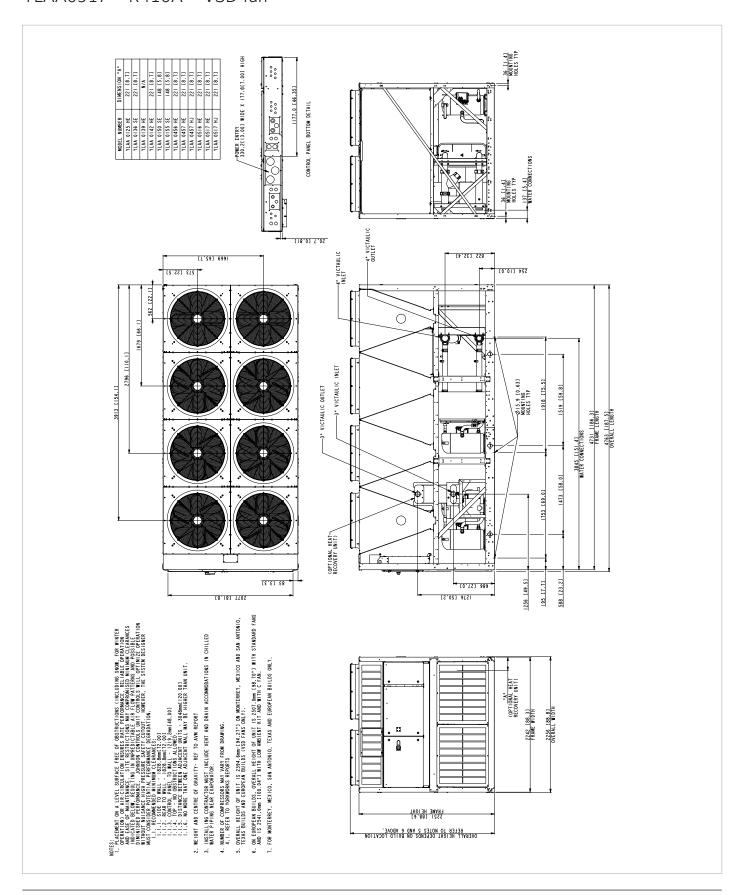
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## Dimensions and Hydraulic Connections

YLAA0517 - R454B - EC fan YLAA0517 - R454B - VSD fan YLAA0517 - R410A - VSD fan





#### **About Johnson Controls**

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers and manufacturing.

With a global team of 100,000 experts in more than 150 countries and over 130 years of innovation, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Sabroe®, Frick®, ZETTLER® and Sensormatic®.

For additional information, please visit www.johnsoncontrols.com or follow us @johnsoncontrols on Twitter.

