

AE²

Information Package



Tecumseh



AE² External
Information Package

AE² Agenda

AE² Information Package

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Why a new AE²?

REDUCED ENERGY CONSUMPTION

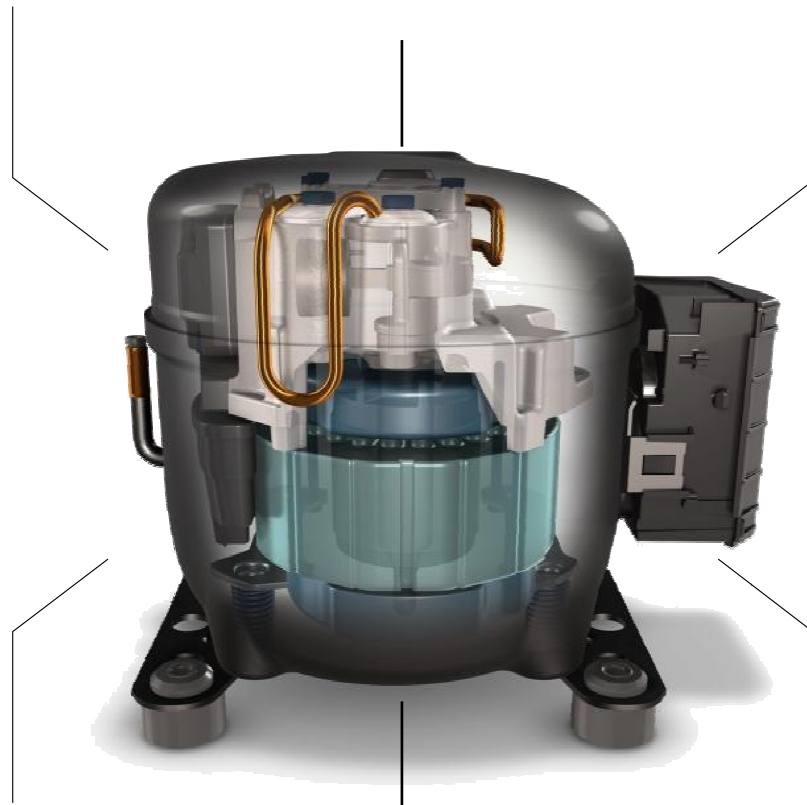
Most efficient compressor of its size on the market.

WIDER CAPACITY IN A SMALLER ENVELOPE

Reduced size envelope covers capacities normally served by larger compressors.

ENVIRONMENTALLY FRIENDLY

Designed for optimal performance with “Green” hydrocarbon refrigerant R290. (Supports HFCs R134a and R404A).



SERVICE AND SUPPORT

Backed by Tecumseh's network of knowledgeable application engineers, test labs & support personnel.

PRODUCT OFFERING

Available across the globe, with flexibility to meet regional needs and agency approvals.

PROVEN RELIABILITY

Leverages robust design attributes developed from 50 years of AE commercial refrigeration experience.

AE² Compressor Range

PRESENTATION OF NEW AE² COMPRESSOR RANGE

R290 (Propane)		R134a		R404A		R22	
LBP	HBP	LBP	HBP	LBP	HBP	LBP	HBP
AE2410U	AE4425U	AE1390Y	AE4425Y	AE2410Z	AE4425Z		AE4425E
AE2415U	AE4430U		AE4430Y	AE2415Z	AE4430Z		AE4430E
AE2420U	AE4440U		AE4440Y	AE2420Z	AE4440Z		AE4440E
	AE4450U		AE4450Y	AE2425Z	AE4450Z		AE4450E
	AE4460U		AE4456Y		AE4460Z		AE4460E
		NEW →	AE4460Y		AE4470Z		AE4470E

- New AE² range covers the entire AEZ/AE range.
- On top of the range R134a and R404A , AE² is available with R290
- The R134a HP range enlarged with AE4460Y, more capacity within the same size

AE² Compressor Range

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - HBP R134a

HBP R134a					
PREVIOUS	NEW				
<u>Compressor AEZ/AE</u>	<u>Compressor AE²</u>	<u>Voltage</u>	<u>BOM</u>	<u>Comments</u>	<u>Certifications</u>
AEZ4425Y	AE4425Y	FZ	AE-1013-FR	Standard	VDE / Gost Russia, Ukraine
	AE4425Y	FZ	AE-1014-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AEZ3425Y	AE4425Y	FZ	AE-1013-FR	Standard	VDE / Gost Russia, Ukraine
	AE4425Y	FZ	AE-1014-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE4430Y	AE4430Y	FZ	AE-1036-BF	Standard	VDE / Gost Russia, Ukraine
	AE4430Y	FZ	AE-1037-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE4430Y	AA	AE-1035-FR	Standard	UL / Gost Russia, Ukraine
	AE4430Y	AA	AE-1036-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE3430Y	AE4430Y	FZ	AE-1036-BF	Standard	VDE / Gost Russia, Ukraine
	AE4430Y	FZ	AE-1037-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE4430Y	AA	AE-1035-FR	Standard	UL / Gost Russia, Ukraine
CAE4440Y	AE4440Y	FZ	AE-1038-BF	Standard	VDE / Gost Russia, Ukraine
	AE4440Y	FZ	AE-1039-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE3440Y	AE4440Y	FZ	AE-1038-BF	Standard	VDE / Gost Russia, Ukraine
	AE4440Y	FZ	AE-1039-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE4448Y	AE4450Y	FZ	AE-1020-BF	Standard	VDE / Gost Russia, Ukraine
	AE4450Y	FZ	AE-1021-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE4456Y	AE4456Y	FZ	AE-1034-BF	Standard	VDE / Gost Russia, Ukraine
	AE4456Y	FZ	AE-1035-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE4460Y	FZ	AE-1015-FR	Junior box	VDE / Gost Russia, Ukraine

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - LBP R134a

LBP R134a					
PREVIOUS	NEW				
<u>Compressor AEZ/AE</u>	<u>Compressor AE²</u>	<u>Voltage</u>	<u>BOM</u>	<u>Comments</u>	<u>Certification</u>
AEZ1380Y	AE1390Y	FZ	AE-1019-BF	Standard	VDE / Gost Russia, Ukraine,
	AE1390Y	FZ	AE-1017-BF	Cable clamp and terminal board	VDE / Gost Russia, Ukraine

AE² Compressor Range

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - HBP R404A

HBP R404A					
PREVIOUS	NEW				
Compressor AEZ/AE	Compressor AE ²	Voltage	BOM	Comments	Certification
AEZ4425Z	AE4425Z	FZ	AE-1005-FR	Standard	VDE / Gost Russia, Ukraine
	AE4425Z	FZ	AE-1006-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AEZ4430Z	AE4430Z	FZ	AE-1007-FR	Standard	VDE / Gost Russia, Ukraine
	AE4430Z	FZ	AE-1008-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AEZ3430Z	AE4430Z	FZ	AE-1007-FR	Standard	VDE / Gost Russia, Ukraine
AEZ4440Z	AE4440Z	FZ	AE-1003-FR	Standard	VDE / Gost Russia, Ukraine
	AE4440Z	FZ	AE-1004-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AEZ3440Z	AE4440Z	FZ	AE-1003-FR	Standard	VDE / Gost Russia, Ukraine
AEZ9440Z	AE4440Z	FZ	AE-1004-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE4450Z	AE4450Z	FZ	AE-1017-FR	Standard	VDE / Gost Russia, Ukraine
	AE4450Z	FZ	AE-1018-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE3450Z	AE4450Z	FZ	AE-1017-FR	Standard	VDE / Gost Russia, Ukraine
CAE9450Z	AE4450Z	FZ	AE-1018-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE4460Z	AE4460Z	FZ	AE-1001-FR	Standard	VDE / Gost Russia, Ukraine
	AE4460Z	FZ	AE-1002-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE9460Z	AE4460Z	FZ	AE-1002-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE4470Z / CAE9470Z	AE4470Z	FZ	AE-1016-FR	Junior box	VDE / Gost Russia, Ukraine

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - LBP R404A

LBP R404A					
PREVIOUS	NEW				
Compressor AEZ/AE	Compressor AE ²	Voltage	BOM	Comments	Certification
AEZ2411Z	AE2410Z	FZ	AE-1025-FR	Standard	VDE / Gost Russia, Ukraine
	AE2410Z	FZ	AE-1026-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AEZ2415Z	AE2415Z	FZ	AE-1009-FR	Standard	VDE / Gost Russia, Ukraine
	AE2415Z	FZ	AE-1010-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
CAE2417Z	AE2420Z	FZ	AE-1029-FR	Standard	VDE / Gost Russia, Ukraine
	AE2420Z	FZ	AE-1030-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE2420Z	AA	AE-1027-FR	Standard	UL / Gost Russia, Ukraine
AE1417Z	AE2420Z	FZ	AE-1029-FR	Standard	VDE / Gost Russia, Ukraine
	AE2420Z	FZ	AE-1030-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE2420Z	AA	AE-1027-FR	Standard	UL / Gost Russia, Ukraine
CAE2420Z	AE2420Z	FZ	AE-1029-FR	Standard	VDE / Gost Russia, Ukraine
	AE2420Z	FZ	AE-1030-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE2420Z	AA	AE-1027-FR	Standard	UL / Gost Russia, Ukraine
AE1420Z	AE2420Z	AA	AE-1029-FR	Cable clamp and terminal board	UL / Gost Russia, Ukraine
	AE2420Z	FZ	AE-1029-FR	Standard	VDE / Gost Russia, Ukraine
CAE2424Z	AE2420Z	FZ	AE-1030-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
	AE2425Z	FZ	AE-1039-FR	Junior box – Launch May 2013	VDE / Gost Russia, Ukraine

AE² Compressor Range

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - HBP R290

HBP R290				
NEW				
Compressor AE ²	Voltage	BOM	Comments	Certification
AE4425U	FZ	AE-1040-FR	Sample available	VDE / Gost Russia, Ukraine
AE4425U	FZ	AE-1041-FR	Standard	VDE / Gost Russia, Ukraine
AE4430U	FZ	AE-1019-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE4430U	FZ	AE-1020-FR	Standard	VDE / Gost Russia, Ukraine
AE4440U	FZ	AE-1021-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE4440U	FZ	AE-1022-FR	Standard	VDE / Gost Russia, Ukraine
AE4450U	FZ	AE-1023-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE4450U	FZ	AE-1024-FR	Standard	VDE / Gost Russia, Ukraine
AE4460U	FZ	AE-1037-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE4460U	FZ	AE-1038-FR	Standard	VDE / Gost Russia, Ukraine

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - LBP R290

LBP R290				
NEW				
Compressor AE ²	Voltage	BOM	Comments	Certification
AE2410U	FZ	AE-1042-FR	Launch June 2013	VDE / Gost Russia, Ukraine
AE2410U	FZ	AE-1043-FR		
AE2415U	FZ	AE-1011-FR	Standard	VDE / Gost Russia, Ukraine
AE2415U	FZ	AE-1012-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine
AE2420U	FZ	AE-1044-FR	Standard	VDE / Gost Russia, Ukraine
AE2420U	FZ	AE-1045-FR	Cable clamp and terminal board	VDE / Gost Russia, Ukraine

CURRENT AVAILABILITY OF AE² COMPRESSOR MODELS - HBP R22

HBP R22				
NEW				
Compressor AE ²	Voltage	BOM	Comments	Certification
AE4440E	FZ	AE-1147-E	Vertical tubes	VDE / Gost Russia, Ukraine
AE4450E	FZ	AE-1173-E	horizontal tubes	VDE / Gost Russia, Ukraine
		AE-1216-E	vertical tubes	VDE / Gost Russia, Ukraine
AE4460E	FZ	AE-1172-E	horizontal tubes	VDE / Gost Russia, Ukraine
		AE-1217-E	vertical tubes	VDE / Gost Russia, Ukraine

AE² Full Line Up Qualification

DEVELOPMENT RANKING AT TECUMSEH EUROPE

	2012			2013					
	Q4			Q1			Q2		
	oct-12	nov-12	dec-12	jan-13	feb-13	mar-13	apr-13	may-13	jun-13
AE ²									
	AE4425Y-FZ	AE2415Z-FZ	AE2415U-FZ						
	AE4430Y-FZ	AE2410Z-FZ			AE2420Z-FZ		AE4470Z-FZ	AE2425Z-FZ	AE2420U-FZ
	AE4440Y-FZ		AE4425Z-FZ				AE2420Z-AA	AE4425Z-GS	AE4440Y-AA
	AE4450Y-FZ	AE4430U-FZ	AE4430Z-FZ					AE4440Y-GS	AE4440Z-GS
	AE4456Y-FZ	AE4440U-FZ	AE4440Z-FZ				AE4430Y-AA	AE4460U-FZ	AE4425U-FZ
	AE4460Y-FZ	AE4450U-FZ	AE4450Z-FZ						
			AE4460Z-FZ						

	2013						2014		
	Q3			Q4			Q1		
	jul-13	aug-13	sep-13	oct-13	nov-13	dec-13	jan-14	feb-14	mar-14
AE ²									
	AE4456Y-AA	AE4430Y-GS	AE4456Y-GS	AE4450Y-GS					
	AE4450Y-AA	AE4450Z-FS	AE4430Z-GS	AE4450Z-GS	AE2425Z-ES	AE2425Z-AA	AE2410Z-AA	AE4460Z-GS	
	AE4450Y-ES	AE4425Y-AA	AE4470Z-AA	AE4460Z-AA	AE2415Z-GS	AE4440Z-AA	AE2415Z-AA		
	AE2410U-FZ	AE4450Y-FS	AE4450Z-ES	AE2420Z-FS	AE4450Z-AA	AE4430Z-AA	AE2410Z-GS		
	AE4425Z-AA	AE4425Y-GS	AE4470Z-ES	AE2420Z-ES	AE2425Z-FS	AE4470Z-FS			

HP-R134a
HP-R404A
BP-R404A
HP-R290
BP-R290

AE² Voltage Types

VOLTAGE RATIONALISATION

Voltage AEZ/AE	Voltage AE ²	Alternative
FZ (220v-240v / 50Hz)	FZ (220v-240v / 50Hz)	
XA (100-115V - 50/60Hz)	AA (115v / 60hz)	
HZ (208V / 60hz)	GS (220v / 50/60Hz)	ES (220V / 60Hz)
CZ (208V / 50Hz - 230V / 60Hz)		FS (220V / 50Hz)
GZ (208v / 50Hz)		
WZ	not developed	
M	not developed	

The **AE²** compressors will be developed in priority with tension **FZ**, **AA** and **GS** (dual - frequency).

If the voltage **GS** is technically not feasible, the model will be developed, with **ES** and **FS** voltage.

AE² Development Ranking

			FZ (220V/240V- 50Hz)	AA (115V - 60Hz)	GS (220V - 50/60Hz)	ES (220V - 60Hz)	FS (220V - 50Hz)
HBP	R134a	AE4425Y	CSIR	CSIR	CSIR		
		AE4430Y	CSIR	CSIR	CSIR		
		AE4440Y	CSIR	CSIR	CSIR		
		AE4450Y	CSIR	CSIR	CSR	CSIR	CSIR
		AE4456Y	CSIR	CSIR	CSR		
		AE4460Y	CSR				
	R404A	AE4425Z	CSIR	CSIR	CSIR		
		AE4430Z	CSIR	CSIR	CSIR		
		AE4440Z	CSIR	CSIR	CSIR		
		AE4450Z	CSIR	CSIR	CSR	CSIR	CSIR
		AE4460Z	CSIR	CSIR	CSR		
		AE4470Z	CSR	CSR		CSR	CSR
	R290	AE4425U	CSIR				
		AE4430U	CSIR				
		AE4440U	CSIR				
		AE4450U	CSIR				
		AE4460U	CSIR				
	LBP	R404A	AE2410Z	CSIR	CSIR	CSIR	
AE2415Z			CSIR	CSIR	CSIR		
AE2420Z			CSIR	CSIR		CSR	CSR
AE2425Z			CSR	CSR		CSR	CSR
R290		AE2410U	CSIR				
		AE2415U	CSIR				
		AE2420U	CSIR				

CSIR VERSION



CSR VERSION



AE² Product Description Nomenclature – Tecumseh Europe

AE4430 Y – FZ 1 A _ DCAE132. 2001

Refrigerant

Y = R134a
Z = R404A
U = R290

Voltage

FZ, AA, GS (ES, FS)

**Index Compressor
Motor Evolution**

1 = without permanent capacitor
2 = with permanent capacitor as an option
3 = with permanent capacitor

**Drawing / Definition of the
Compressor**

(Height, Tube Positioning,
Footprint)

Sales Options

2000: without terminal
board and cable clamp

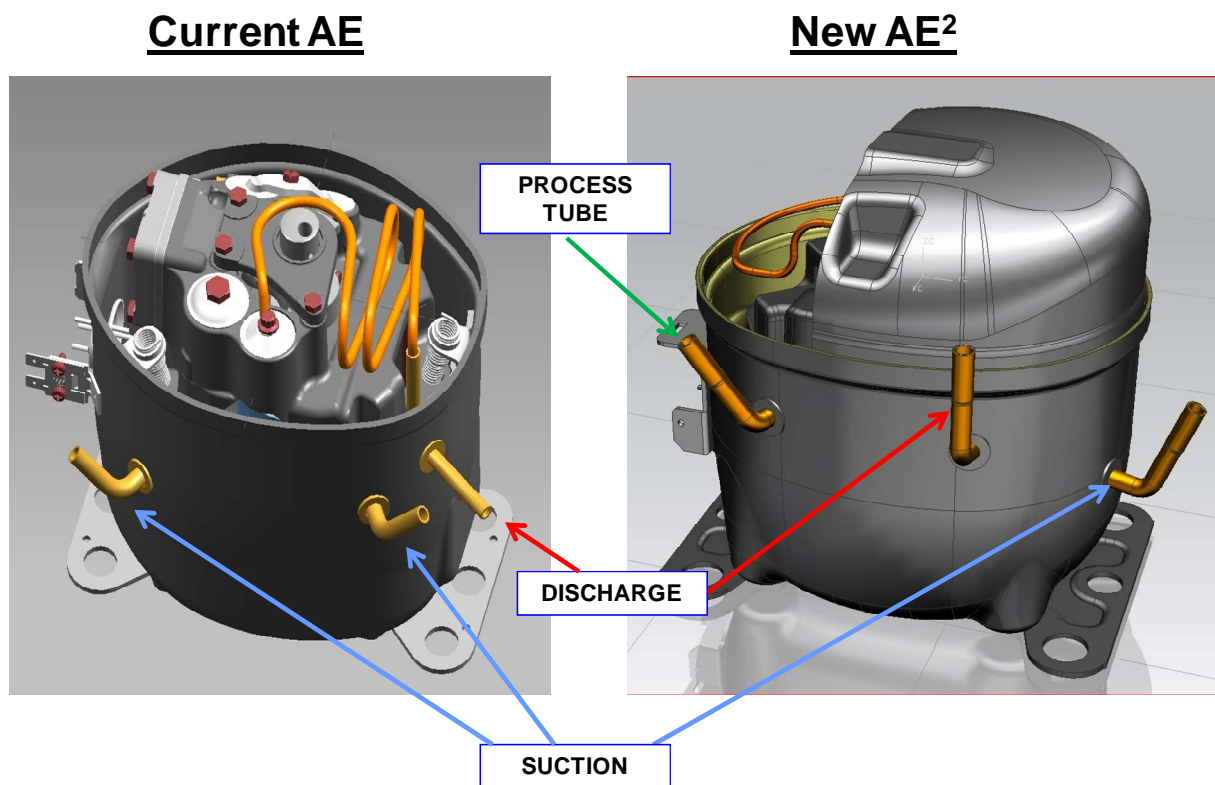
2001: with terminal
board and cable clamp

2006: with junior box

AE² Tube Configuration

TUBE CONFIGURATION


The tube position of AE² compressor have to be respected (process, suction and discharge) and cannot be assembled with inverted positions.




AE² Tube Configuration


TUBE CONFIGURATION


One document is included in each packaging (single and industrial packaging)





The diagram shows a cylindrical tank with three ports. On the left side, there is a port labeled 'Processo', 'Process', 'Proceso', and 'Process'. On the right side, there are two ports: the upper one is labeled 'Descarga', 'Discharge', 'Descarga', and 'Refoulement'; the lower one is labeled 'Sucção', 'Suction', 'Succión', and 'Aspiration'.

 **Atenção!**
Respeite as posições dos tubos (processo, sucção e descarga) que não poderão ser montados invertidos.

 **Caution!**
Respect the tubes position (process, suction and discharge) that can not be assembled with changed positions.

 **¡Atención!**
Respete la posición de los tubos (proceso, succión y descarga) que no se la podrá cambiar.

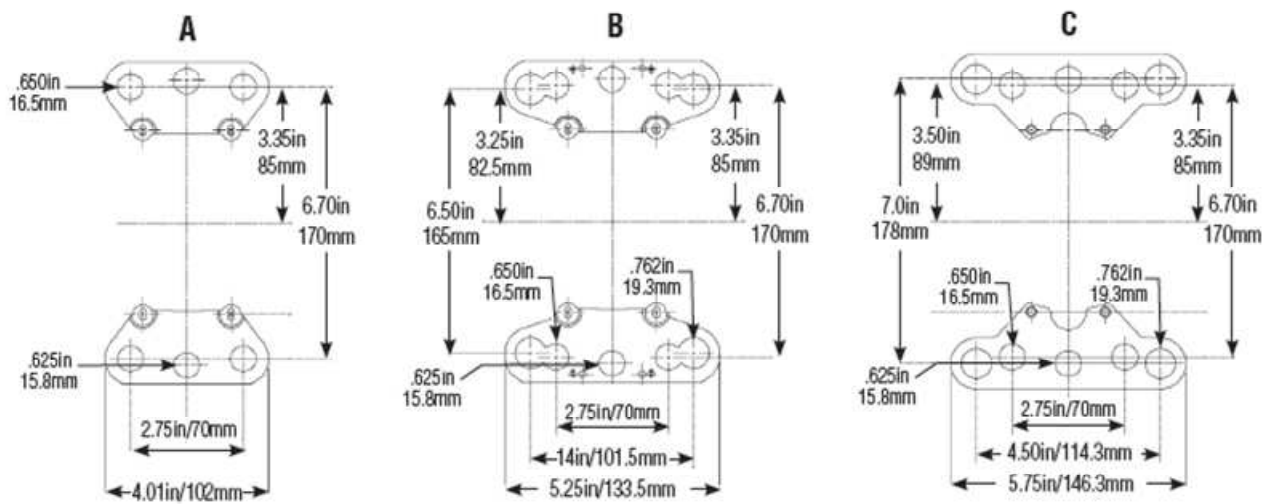
 **Attention**
Veillez à respecter les positions des tubes (process, aspiration et refoulement) qui ne doivent pas être inversés.



AE² Mounting Brackets

3 DIFFERENT BASE PLATE FOOTPRINTS:

Base Plate Footprint/Entraxe patte de fixation



AE² Technical Data

HP 134a

Models	voltage types available	Displacement (cm ³)	Motor Type	Refrigeration Capacity (Watt) EN12900 T° condensing +45°C , sub-cooling 0K, RTG 20°C							EN12900 T° evaporating -10°C	
				T° evaporating							P abs (Watt)	COP (W/W)
				-15	-10	-5	0	5	10	15		
AE4425Y	FZ	6,69	CSIR	249	324	414	519	644	788	955	215	1,51
AE4430Y	FZ	8,02	CSIR	294	382	488	613	760	930	1127	237	1,61
AE4440Y	FZ	10,33	CSIR	399	508	637	790	968	1176	1417	302	1,68
AE4450Y	FZ	13,24	CSIR	526	672	843	1042	1273	1540	1847	370	1,82
AE4456Y	FZ	14,51	CSIR	579	737	921	1133	1380	1664	1990	424	1,74
AE4460Y	FZ	15,09	CSIR	608	774	967	1190	1449	1747	2090	480	1,61

Models	tube diameter			Weight (kg)	Mounting Brackets (mm)
	suction (mm/inches)	discharge (mm/inches)	process (mm/inches)		
AE4425Y	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	9,1	170X70
AE4430Y	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	9,4	170X70
AE4440Y	7,9 - 5/16"	6,35 - 1/4"	6,35 - 1/4"	9,6	165X101,6
AE4450Y	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	178X114,3
AE4456Y	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11	178X114,3
AE4460Y	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11,3	178X114,3

AE² Technical Data

LBP 404A

Models	voltage types available	Displacement (cm ³)	Motor Type	Refrigeration Capacity (Watt) EN12900 T°condensing +40°C , sub-cooling 0K, RTG 20°C						EN12900 T°evaporating -35°C	
				T°evaporating						P abs	COP
				-35°C	-30°C	-25°C	-20°C	-15°C	-10°C		
AE2410Z	FZ	5,02	CSIR	140	189	246	315	398	496	159	0,88
AE2415Z	FZ	6,69	CSIR	186	251	327	419	529	660	206	0,90
AE2420Z	FZ	9,35	CSIR	257	346	451	578	730	911	305	0,84
AE2425Z	FZ	12,01	CSR	334	450	587	752	949	1184	367	0,91

Models	tube diameter			Weight (kg)	Mounting Brackets (mm)
	suction (mm/inches)	discharge (mm/inches)	process (mm/inches)		
AE2410Z	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	9,9	170X70
AE2415Z	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	170X70
AE2420Z	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,1	165X101,6
AE2425Z	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,1	178X114,3

AE² Technical Data

HP 404A

Models	voltage types available	Displacement (cm ³)	Motor Type	Refrigeration Capacity (Watt) EN12900 T° condensing +45°C , sub-cooling 0K, RTG 20°C							EN12900 T° evaporating -10°C	
				T° evaporating							P abs (Watt)	COP (W/W)
				-15	-10	-5	0	5	10	15		
AE4425Z	FZ	4,24	CSIR	257	326	407	502	613	741	889	213	1,53
AE4430Z	FZ	5,16	CSIR	320	404	500	611	740	888	1057	266	1,52
AE4440Z	FZ	6,69	CSIR	433	546	676	826	1000	1199	1427	341	1,60
AE4450Z	FZ	8,85	CSIR	576	720	885	1074	1289	1534	1812	445	1,62
AE4460Z	FZ	10,33	CSR	713	875	1062	1275	1519	1799	2117	524	1,67
AE4470Z	FZ	12,01	CSR	843	1035	1251	1495	1773	2088	2447	620	1,67

Models	tube diameter			Weight (kg)	Mounting Brackets (mm)
	suction (mm/inches)	discharge (mm/inches)	process (mm/inches)		
AE4425Z	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	170X70
AE4430Z	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	170X70
AE4440Z	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,2	178X114,3
AE4450Z	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	178X114,3
AE4460Z	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11	178X114,3

AE² Technical Data

HP R290

Models	voltage types available	Displacement (cm ³)	Motor Type	Refrigeration Capacity (Watt) EN12900 T°condensing +45°C, sub-cooling 0K, RTG 20°C							EN12900 T°evaporating-10°C	
				T°evaporating							P abs (Watt)	COP (W/W)
				-15	-10	-5	0	5	10	15		
AE4425U	FZ	5,02	CSIR	276	348	430	523	629	749	884	195	1,78
AE4430U	FZ	6,12	CSIR	331	417	516	628	755	899	1061	239	1,74
AE4440U	FZ	8,02	CSIR	434	546	676	823	989	1178	1390	322	1,70
AE4450U	FZ	10,33	CSIR	608	741	892	1065	1262	1485	1738	421	1,76
AE4460U	FZ	12,01	CSIR	729	889	1070	1278	1514	1782	2085	478	1,86

Models	tube diameter			Weight (kg)	Mounting Brackets (mm)
	suction (mm/inches)	discharge (mm/inches)	process (mm/inches)		
AE4425U	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10	170X70
AE4430U	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10,1	170X70
AE4440U	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,2	178X114,3
AE4450U	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,5	178X114,3
AE4460U	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	11,2	178X114,3

AE² Technical Data

LBP R290

Models	voltage types available	Displacement (cm ³)	Motor Type	Refrigeration Capacity (Watt) EN12900 T° condensing +40°C, sub-cooling 0K, RTG 20°C						EN12900 T° evaporating -35°C	
				T° evaporating						P abs	COP
				-35°C	-30°C	-25°C	-20°C	-15°C	-10°C		
AE2410U	FZ	5,48	CSIR	133	180	229	286	351	426	128	1,04
AE2415U	FZ	8,85	CSIR	219	288	366	457	562	682	215	1,02
AE2420U	FZ	10,96	CSIR	274	357	454	567	697	846	264	1,04

Models	tube diameter			Weight (kg)	Mounting Brackets (mm)
	suction (mm/inches)	discharge (mm/inches)	process (mm/inches)		
AE2410U	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10,5	170X70
AE2415U	6,35 - 1/4"	4,76 - 3/16"	6,35 - 1/4"	10,6	170X70
AE2420U	9,5 - 3/8"	6,35 - 1/4"	6,35 - 1/4"	10,6	165X101,6

Benefits AE² compared to AE Range

HBP R404A

	Compressors	Displacement CC	Motor	Cooling capacity (Watt) EN12900 condensing T°+45°C , subcooling 0K, Return Gas 20°C							EN12900 evaporating T°-10°C		Weight Kg
				evaporating T°							Power input(Watt)	COP (W/W)	
				-15	-10	-5	0	5	10	15			
New	AE4425Z	4,24	CSIR	257	326	407	502	613	741	889	213	1,53	10
	AEZ4425Z	4,5	CSIR	256	327	408	499	599	705	818	241	1,36	10
											11%		
New	AE4430Z	5,16	CSIR	320	404	500	611	740	888	1057	266	1,52	10
	AEZ4430Z	5,7	CSIR	337	425	526	638	760	890	1027	301	1,41	10
											7%		
New	AE4440Z	6,69	CSIR	433	546	676	826	1000	1199	1427	341	1,60	10,2
	AEZ4440Z	7,6	CSIR	462	574	707	857	1024	1205	1396	376	1,53	11,2
											5%		
New	AE4450Z	8,85	CSIR	576	720	885	1074	1289	1534	1812	445	1,62	10,5
	CAE4450Z	9,4	CSIR	504	652	823	1020	1247	1508	1806	486	1,34	12,3
											17%		
New	AE4460Z	10,33	CSIR	713	875	1062	1275	1519	1799	2117	524	1,67	11
	CAE4460Z	11,3	CSIR	645	819	1020	1253	1520	1828	2180	578	1,42	12,3
											15%		
New	AE4470Z	12,01	CSR	843	1035	1251	1495	1773	2088	2447	620	1,67	11,2
	CAE9470Z	13,3	CSR	803	1008	1246	1520	1835	2195	2605	608	1,66	13,3
											1%		

AE² efficiency is better than current AEZ/AE (+1 to +17%)

Benefits AE² compared to AE Range

LBP R404A

	Compressors	Displacement CC	Motor	Cooling capacity (Watt) EN12900 condensing T°+45°C , subcooling 0K, Return Gas 20°C						EN12900 evaporating T°-10°C		Weight Kg	
				evaporating T°						Power input(Watt)	COP (W/W)		
				-15	-10	-5	0	5	10				15
New	AE4425Y	6,69	CSIR	266	342	424	519	633	770	938	199	1,72	9,1
	AEZ4425Y	7,6	CSIR	239	320	414	522	641	771	912	205	1,56	9,7
											9%		
New	AE4430Y	8,02	CSIR	294	382	488	613	760	930	1127	237	1,61	9,4
	AEZ4430Y	8,8	CSIR	316	404	512	639	784	946	1122	258	1,57	10,2
											3%		
New	AE4440Y	10,33	CSIR	399	508	637	790	968	1176	1417	302	1,68	9,6
	CAE4440Y	12	CSIR	399	519	666	837	1033	1250	1489	342	1,52	10,8
											10%		
New	AE4450Y	13,24	CSIR	526	672	843	1042	1273	1540	1847	370	1,82	10,5
	CAE4448Y	14,2	CSIR	519	654	822	1023	1253	1512	1797	400	1,64	11,9
											10%		
New	AE4456Y	14,51	CSIR	579	737	921	1133	1380	1664	1990	424	1,74	11
	CAE4456Y	16	CSIR	590	744	933	1156	1411	1695	2006	486	1,53	12,5
											12%		
New	AE4460Y	15,09	CSR	597	766	958	1181	1437	1732	2070	409	1,87	11,3

AE² efficiency is better than current AEZ/AE (+3 to + 12%)

Benefits AE² compared to AE Range

LBP R404A

	compressors	Displacement CC	Motor	Cooling capacity (Watt) EN12900 condensing T° +40°C , sub cooling 0K, Return gas 20°C						EN12900 evaporating T° -35°C		Weight Kg
				evaporating T°						Power input(Watt)	COP (W/W)	
				-35°C	-30°C	-25°C	-20°C	-15°C	-10°C			
New	AE2410Z	5,02	CSIR	140	189	246	315	398	496	159	0,88	9,9
	AEZ2411Z	7,6	CSIR	150	209	280	365	467	586	215	0,70	10
											21%	
New	AE2415Z	6,69	CSIR	194	260	338	429	535	658	215	0,90	10
	AEZ2415Z	8,1	CSIR	185	254	337	436	551	685	232	0,80	11,3
											12%	
New	AE2420Z	9,35	CSIR	265	346	451	578	730	911	305	0,87	10,1
	CAE2420Z	12,6	CSIR	313	415	537	679	841	1023	412	0,76	12,3
											13%	
New	AE2425Z	12,01	CSR	334	450	587	752	949	1184	367	0,91	10,1
	CAE2424Z	15,1	CSR	313	432	578	754	963	1208	391	0,80	13,2
											12%	

AE² efficiency is better than current AEZ/AE (+12 to +21%)

AE² Spare Part References

	Compressor Model	Code Kit Spare Parts	Description	Silent bloc
HBP R134a	AE4425Y-FZ	8655331	KIT CSIR AE4425Y-FZ	8682003
	AE4430Y-FZ	8655321	KIT CSIR AE4430Y-FZ	8682003
	AE4440Y-FZ	8655322	KIT CSIR AE4440Y-FZ	8682040
	AE4450Y-FZ	8655327	KIT CSIR AE4450Y-FZ	8682040
	AE4456Y-FZ	8655326	KIT CSIR AE4456Y-FZ	8682040
	AE4460Y-FZ	8655332	KIT CSR AE4460Y-FZ	8682040
HBP R404A	AE4425Z-FZ	8655325	KIT CSIR AE4425Z-FZ	8682003
	AE4430Z-FZ	8655328	KIT CSIR AE4430Z-FZ	8682003
	AE4440Z-FZ	8655324	KIT CSIR AE4440Z-FZ	8682040
	AE4450Z-FZ	8655333	KIT CSIR AE4450Z-FZ	8682040
	AE4460Z-FZ	8655323	KIT CSIR AE4460Z-FZ	8682040
	AE4470Z-FZ	8655341	KIT CSR AE4470Z-FZ	8682050
LBP R404A	AE2410Z-FZ	8655337	KIT CSIR AE2410Z-FZ	8682003
	AE2415Z-FZ	8655329	KIT CSIR AE2415Z-FZ	8682003
	AE2420Z-FZ	8655339	KIT CSIR AE2420Z-FZ	8682040
	AE2425Z-FZ	8655342	KIT CSR AE2425Z-FZ	8682050
LBP R290	AE2410U-FZ	8655344	KIT CSIR AE2410U-FZ	8682003
	AE2415U-FZ	8655330	KIT CSIR AE2415U-FZ	8682003
	AE2420U-FZ	8655345	KIT CSIR AE2420U-FZ	8682003
HBP R290	AE4425U-FZ	8655343	KIT CSIR AE4425U-FZ	8682003
	AE4430U-FZ	8655334	KIT CSIR AE4430U-FZ	8682003
	AE4440U-FZ	8655335	KIT CSIR AE4440U-FZ	8682040
	AE4450U-FZ	8655336	KIT CSIR AE4450U-FZ	8682040
	AE4460U-FZ	8655347	KIT CSIR AE4460U-FZ	8682040

AE² Multiple Packaging

Collective Packaging (Euro and Standard Pallet)						
	No. of Layers per Pallet	Total Qty per Pallet	No. of Layers per Pallet	Total Qty per Pallet	No. of Layers per Pallet	Total Qty per Pallet
AE2 standard	2	32	3	48	4	64
AE ² CSR with electrical junior box	3	30	4	40	/	/
AE ² CSR without electrical junior box	3	36	4	48	/	/

AE² Unitary Packaging

Unitary Packaging					
Euro Pallet	No. of Layers per Pallet	Total Qty per Pallet	Standard Pallet	No. of Layers per Pallet	Total Qty per Pallet
AE2 standard CSIR	1	16	AE2 standard CSIR	1	20
	2	32		2	40
	3	48		3	60
	4	64		4	80
AE ² CSR with electrical junior box	1	12	AE ² CSR with electrical junior box	1	12
	2	24		2	24
	3	36		3	36
	4	48		4	48

AE² Condensing Units

AE² CONDENSING UNIT RANGE

MODELS AVAILABLE

R134a	R404A	
	HBP	LBP
AE4425YHR-FZ	AE4425ZHR-FZ	AE2410ZBR-FZ
AET4425YHR-FZ	AET4425ZHR-FZ	AE2415ZBR-FZ-FZ
AE4430YHR-FZ	AE4430ZHR-FZ	AE2420ZBR-FZ
AET4430YHR-FZ	AET4430ZHR-FZ	AET2420ZBR-FZ
AE4430YHR-AA *	AE4440ZHR-FZ	AE2425ZBR-FZ *
AET4430YHR-AA *	AET4440ZHR-FZ	AET2425ZBR-FZ *
AE4440YHR-FZ	AE4450ZHR-FZ	
AET4440YHR-FZ	AET4450ZHR-FZ	
AE4450YHR-FZ	AE4460ZHR-FZ	
AET4450YHR-FZ	AET4460ZHR-FZ	
AE4456YHR-FZ	AE4470ZHR-FZ *	
AET4456YHR-FZ	AET4470ZHR-FZ *	
AE4460YHR-FZ		
AET4460YHR-FZ		

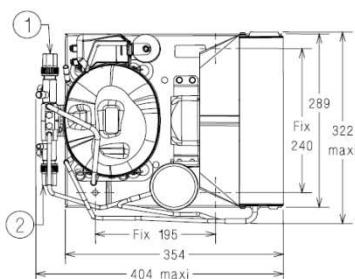
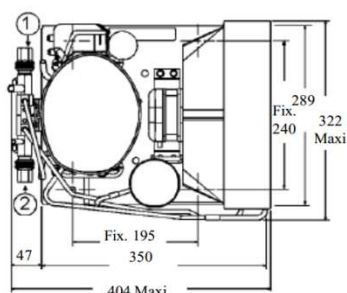
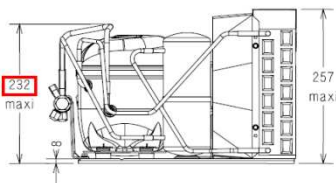
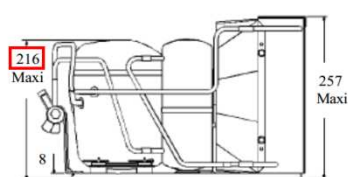
* Production Launch September 2013



AE² Condensing Units

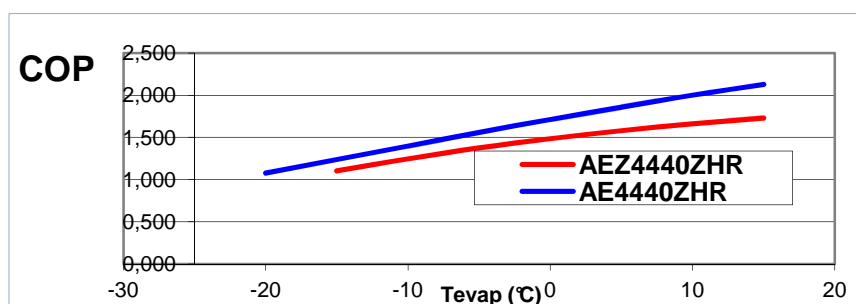
No modification of your installation, upgrade performance

- **No modification of the panel dimension**
- **Same connection (size and placement) for each condensing unit**



AEZ4430YHR

AE4430YHR-FZ



- **The improved COP of the AE² compressor is transferred to the condensing unit (COP improved by +10 to +20%)**

AE² Condensing Units

Technical Data

HBP R134a

R- 134a

Models	Capacity in W En 13215 ambient 32°C S.H. 10K S.C 3K					COP EN 13215 à +5°C évap. and 32°C ambient temp S.C.20°C	Acoustic dB(A)*	Connexion		Liquide receiver
	Evaporating temp:							Pressure at 10m	Succion (inch)	
	-5°C	0°C	5C	+10°C	+15°C		Liters			
AE4425YHR	380	470	570	670	790	1,74	27	3/8	1/4	0,75
AET4425YHR	390	490	590	710	850	1,96	27	3/8	1/4	0,75
AE4430YHR	480	590	710	850	1010	2,14	27	3/8	1/4	0,75
AET4430YHR	500	620	760	910	1070	1,88	33	3/8	1/4	0,75
AE4440YHR	590	710	840	990	1160	1,87	28	3/8	1/4	0,75
AET4440YHR	650	810	980	1190	1430	1,96	38	3/8	1/4	0,75
AE4450YHR	710	860	1020	1200	1420	1,65	33	3/8	1/4	0,75
AE4460YHR	820	1010	1230	1500	1750	1,72	27	1/2	1/4	0,75
AE4456YHR	810	990	1190	1410	1650	1,66	38	3/8	1/4	0,75
AET4450YHR	810	1010	1220	1450	1710	2,11	38	3/8	1/4	0,75
AET4456YHR	890	1090	1320	1580	1860	1,92	38	3/8	1/4	0,75
AET4460YHR	955	1170	1410	1690	1990	1,92	37	1/2	1/4	1,5

AE² Condensing Units

Technical Data

HBP R404A

R-404a positive application

Models	Capacity in W En 13215 ambient 32°C S.H. 10K S.C 3K Evaporating temp:					COP EN 13215 à - 10°C evap. and 32°C ambient temp S.C.20°C	Acoustic dB(A)*	Connexion		Liquide receiver
	-15°C	-10°C	-5°C	0°C	5°C		Pressure at 10m	Succion (inch)	Liquid line (pouce)	Liters
AE4425ZHR	210	270	340	410	480	1,13	27	3/8	1/4	0,75
AET4425ZHR	240	300	370	450	530	1,33	27	3/8	1/4	0,75
AE4430ZHR	300	380	460	560	660	1,29	28	3/8	1/4	0,75
AET4430ZHR	310	390	480	580	690	1,32	33	3/8	1/4	0,75
AE4440ZHR	410	510	620	740	870	1,19	33	3/8	1/4	0,75
AET4440ZHR	440	550	670	800	950	1,27	35	3/8	1/4	0,75
AE4450ZHR	510	630	760	920	1090	1,33	38	3/8	1/4	0,75
AET4450ZHR	540	670	820	990	1190	1,56	38	3/8	1/4	0,75
AE4460ZHR	610	740	890	1050	1220	1,43	38	3/8	1/4	0,75
AET4460ZHR	660	810	990	1180	1400	1,59	38	3/8	1/4	0,75
AE4470ZHR	780	950	1140	1350	1580	1,51	38	3/8	1/4	0,75
AET4470ZHR	800	980	1190	1420	1670	1,58	37	3/8	1/4	0,75

AE² Condensing Units

Technical Data

LBP R404A

R- 134a Negative application

	Capacity in W En 13215 ambient 32°C S.H. 10K S.C 3K Evaporating temp:					COP EN 13215 à - 35°C évap. and 32°C ambient temp S.C.20°C	Acoustic dB(A)* Pressure at 10m	Connexion		Liquide receiver Liters
	-30°C	-25°C	-20°C	-15°C	Models -10°C			Succion (inch)	Liquid line (pouce)	
AE2410ZBR	180	230	290	350	420	0,77	27	3/8	1/4	0,75
AE2415ZBR	210	270	330	390	470	0,80	27	3/8	1/4	0,75
AE2420ZBR	310	390	480	580	680	0,69	28	3/8	1/4	0,75
AET2420ZBR	350	440	550	670	790	0,91	38	3/8	1/4	0,75
AE2425ZBR	410	510	620	740	870	0,80	33	3/8	1/4	0,75
AET2425ZBR	440	560	700	870	1070	1,05	38	3/8	1/4	0,75

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