

AG Hermetic Compressors

Information Package



Tecumseh



AG Hermetic Compressors Internal
Information Package

AG Internal Information Package

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INTERNAL



AG Compressor Range and Performances

R-404A COMMERCIAL POSITIVE REFRIGERATION

Models	Displacement (cm ³)	Cooling capacity (Watt) EN12900 condensing T° +45°C , Subcooling 0K, RGT 20°C							EN12900 evaporating T° -10°C		Tubing diameter (mm - inches)			Voltage available	Weight Kg	Height mm
		Evaporating T°							Power input W	COP W/W	Suction	Discharge	Process			
		-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C								
TAG4546Z	90	4035	5457	7122	9061	11307	13892	16850	2949	1,85	22,2 - 7/8"	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	43	368
TAG4553Z	101	4633	6220	8062	10202	12684	15550	18845	3354	1,85	22,2 - 7/8"	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	45	381
TAG4561Z	112	5389	7107	9082	11363	13998	17036	20527	3782	1,88	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	46	381
TAG4568Z	124	6533	8477	10702	13253	16166	19510	23305	4223	2,01	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	47	393
TAG4573Z	135	7121	9156	11508	14224	17358	20938	25033	4681	1,96	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	49	393
NEW TAG4581Z*	145	7833	10072	12659	15647	19095	23033	27537	5192	1,94	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	TZ	49	393

*Available 3Q 2013

TAG4581T will be available with R-22 refrigerant.

R-404A COMMERCIAL NEGATIVE REFRIGERATION

Models	Displacement (cm ³)	Cooling capacity (Watt) EN12900 condensing T° +40°C , Subcooling 0K, RGT 20°C						EN12900 evaporating T° -35°C		Tubing diameter (mm - inches)			Voltage available	Weight Kg	Height mm
		Evaporating T°						Power input W	COP W/W	Suction	Discharge	Process			
		-35°C	-30°C	-25°C	-20°C	-15°C	-10°C								
NEW TAG2513Z*	101	1913	2468	3208	4138	5255	6570	1708	1,12	22,2 - 7/8"	15,9 - 5/8"	9,5 - 3/8"	TZ	44	368
TAG2516Z	112	2341	3149	4218	5512	7061	8851	2106	1,11	22,2 - 7/8"	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	44	368
TAG2522Z	135	3187	4127	5380	6903	8733	10853	2725	1,17	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	KZ, TZ	47	381
NEW TAG2525Z*	145	3607	4653	6048	7803	9909	12387	3164	1,14	28,6 - 1"1/8	15,9 - 5/8"	9,5 - 3/8"	TZ	47	381

*Available 3Q 2013

Why a new AG?

The AG range is expanding with 3 new models to offer more cooling capacity in the same dimension:

NEW	TAG4581Z	Positive refrigeration
NEW	TAG2513Z	Negative refrigeration
NEW	TAG2525Z	Negative refrigeration



NEW AG BOM

TAG4581Z -TZ → 2836330102

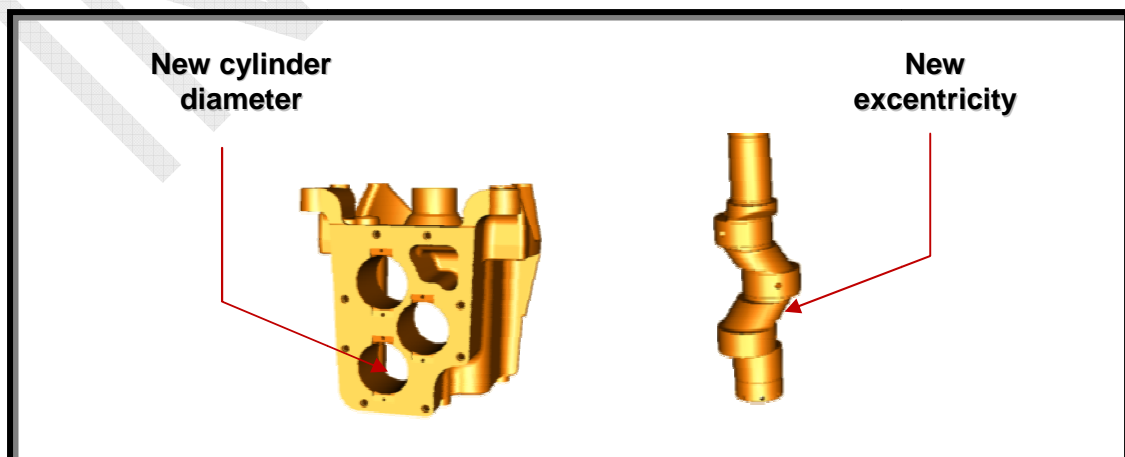
TAG4581T -TZ → 2831130102

TAG2513Z -TZ → 2835330102

TAG2525Z -TZ → 2835530102

DESIGN IMPROVEMENTS

1. Increase displacement of 135cc to 145cc
2. Decrease dead volume → thanks to valve plate and piston new design
3. New motor design



Why a new AG?

They are designed and assembled based on the values that built the reputation of the AG range. This family is well-known on the market for its reliability and durability.

Reliability for demanding applications

These compressors are world-renowned for their reliability and ability to operate in demanding or difficult applications (hot gas defrosting on ice-making machine, or pull-down with start-up outside the evaporating range on milk tanks). AG compressors are a benchmark on the commercial refrigeration market.

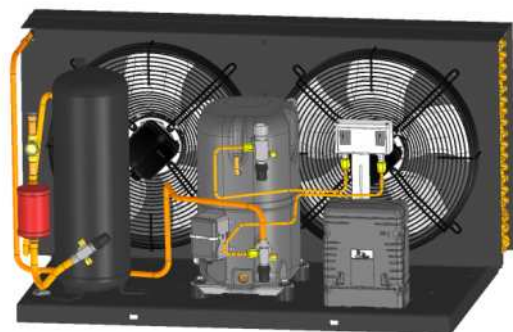
Modularity for greater competitiveness

AG compressors are suited to refrigerating systems with large power variations, which can operate on a rack. TAGP compressors are equipped as standard with an oil sight glass indicator, and an oil equalization connector equalizer coupling so that they can be installed quickly and easily on the central plant, to boost and modulate the power.

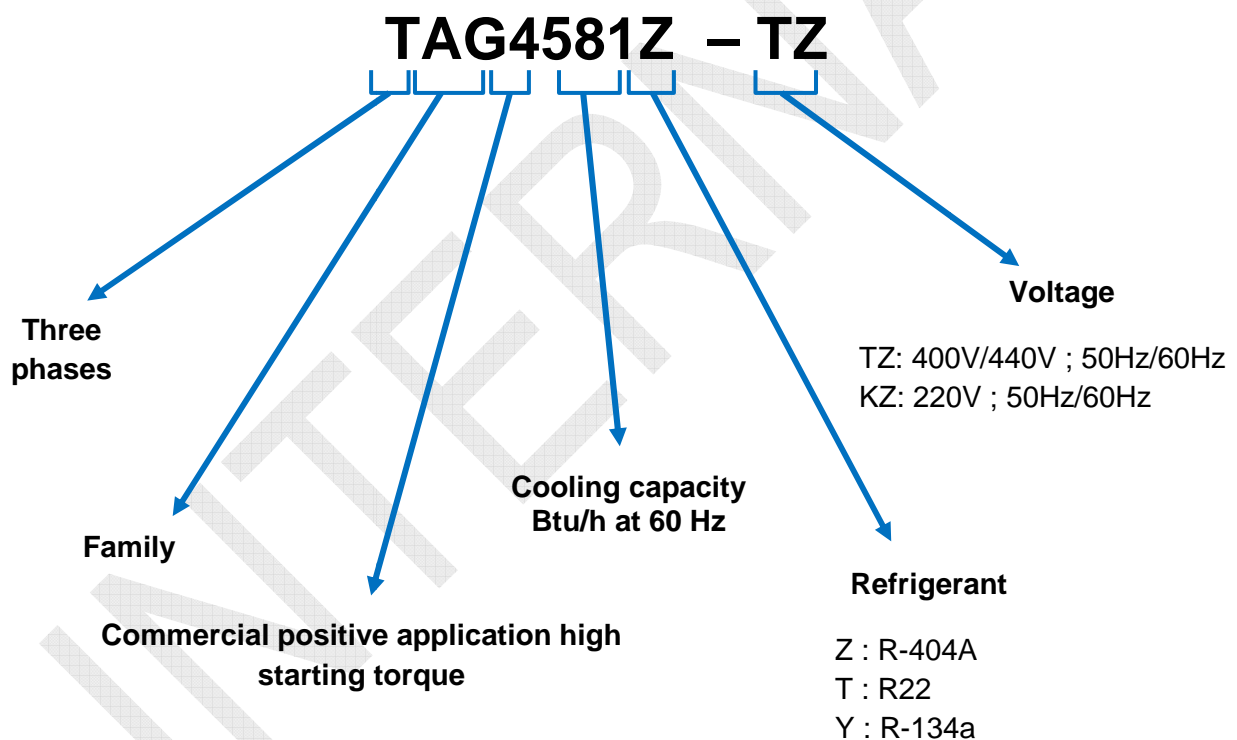


Guaranteed Performance

As an active member of Asercom, Tecumseh guarantees the refrigeration performance level and energy efficiency level of its AG compressors. To this end Tecumseh offers reliable and transparent information to customers and users, to reinforce trust in the solutions it provides. For its customers, this is also a competitive advantage in winning the trust of their own customers.



AG Product Description Nomenclature – Tecumseh Europe



AG Technical Data HP R-404A

Compresseur / Compressor
Code tension / Voltage code : T

TAG4581Z

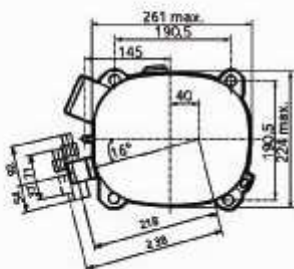
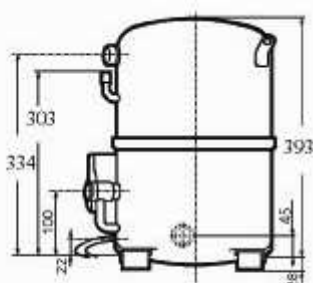
Froid commercial et industriel positif (HP)
Commercial & industrial application (HBP)

400-440V / 50-60Hz - 3-

R404A

N° 227MU-T - ind a

Conditions Conditions	fréquence frequency	Prod frigorifique nominale / nominal refrigerating capacity			Puis. sonore Sound level
		Watts	Kcal/h	BTU/h	
Cecomaf	50 Hz	16098			ISO 3745 / ISO 3743-1
Cecomaf	60 Hz	18853			84 dBA



Cylindrée / Displacement: 145 cm³
Poids net / Net weight: 49 Kg
Charge en huile / Oil charge: 1960 cm³
Type d'huile / Oil type: P.O.E /
Détente / Expansion device: Capillaire/Détendeur
Capillary/Expⁿ valve
Refroidissement / Cooling: Ventilé / Forced

Résistance à 20° C / Windings resistances at 20° C
Phases 1,2,3 / Phase N° 1,2,3 : 1.63 Ohms

Intensité / Current
nom. / Rated current RLA: 12.7 / 13.9 A
max. / Max current : 21 / 21 A
dém. / Start current LRA: 83 / 85 A

Ap. Electrique / Electrical equipment TRI

Protecteur / Overload: Interne / Internal

Pour conduites Ø ext / For tubing O.D.

Aspiration Suction	Refoulement Discharge	Charge Process
28.6 (1 1/8")	15.9 (5/8")	6.35 (1/4")

Les caractéristiques données dans cette fiche technique peuvent évoluer sans avis préalable, avec les améliorations que TECUMSEH EUROPE external toujours apporte à sa "TECUMSEH EUROPE"; is a constant endeavor to improve its products reserves the right to change any information contained in this leaflet without prior

PRELIMINARY

 L'UNITE
HERMETIQUE

 Tecumseh

TAG4581Z	Tension T : 400V 3~ 50Hz / 440V 3~ 60 Hz	R404A	N°227MU-T	Ind a
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Conditions d'annonce :	Gaz aspirés :	35°C
	Temp liquide :	35°C
Rating conditions :	Return gas :	35°C
	Liquid temp :	35°C

50 Hz R404A

4 T condensation	5 T évaporation	(°C)	-15	-10	-5	0	5	10	15
55	1 P frigorifique	(W)	8512	10979	13890	17569	21485	25721	30293
	2 P absorbée	(W)	4945	5620	6385	7161	7889	8517	9106
	3 I absorbée	(A)	8.67	9.48	10.4	11.6	12.61	13.95	14.3

60 Hz R404A

4 T condensation	5 T évaporation	(°C)	-15	-10	-5	0	5	10	15
55	1 P frigorifique	(W)	10651	13584	16932	20850	25161	29754	33406
	2 P absorbée	(W)	6204	7112	8012	8974	9905	10716	11104
	3 I absorbée	(A)	9.05	10.2	11.37	12.7	13.91	14.98	16.11

1 = refrigerating capacity 2 = watt input 3 = current 4 = condensing temperature 5 = evaporating temperature

Nota : Les caractéristiques données dans cette fiche technique peuvent évoluer sans avis préalable, avec les améliorations que "TECUMSEH EUROPE" entend toujours apporter à sa production.

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PRELIMINARY



AG Technical Data LBP R-404A

Compresseur / *Compressor*
Code tension / *Voltage code* : T

TAG2525Z

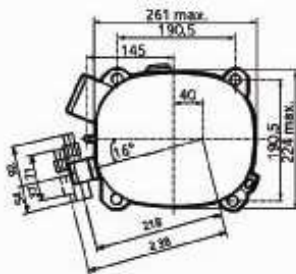
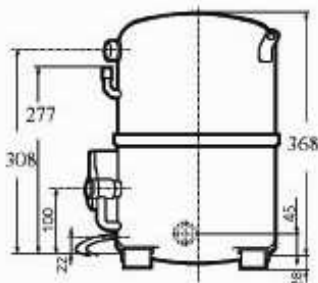
Froid commercial et industriel négatif (BP)
Low back pressure commercial application

400-440V / 50-60Hz - 3~

R404A

N° 127MU-T - ind a

Conditions <i>Conditions</i>	fréquence <i>frequency</i>	Prod frigorifique nominale / <i>nominal refrigerating capacity</i>			Puis. sonore <i>Sound level</i>
		Watts	Kcal/h	BTU/h	
Cecomat	50 Hz	4187			ISO 3745 / ISO 3743-1
Cecomat	60 Hz	5268			



Cylindrée / *Displacement*: 145 cm³
Poids net / *Net weight*: 47 Kg
Charge en huile / *Oil charge*: 1960 cm³
Type d'huile / *Oil type*: P.O.E /
Détente / *Expansion device*: Capillaire/Détendeur
Capillary/Exp^o valve
Refroidissement / *Cooling*: Ventilé / *Forced*

Résistance à 20° C / *Windings resistances at 20° C*
Phases 1,2,3. / *Phase N° 1,2,3*: 2.93 Ohms

Intensité / *Current*
nom. / *Rated current RLA*: 6.3 / 6.9 A
max. / *Max current*: 13.3 /
dém. / *Start current LRA*: 56 / 58 A

Ap. Electrique / *Electrical equipment*: TRI

Protecteur / *Overload*: Interne / *Internal*

Pour conduites Ø ext / *For tubing O.D.*

Aspiration <i>Suction</i>	Refoulement <i>Discharge</i>	Charge <i>Process</i>
22.2 (7/8")	15.9 (5/8")	6.35 (1/4")

Les caractéristiques données dans cette fiche technique peuvent évoluer sans avis préalable, avec les améliorations que TECUMSEH EUROPE entend toujours apporter à sa "TECUMSEH EUROPE"; is a constant endeavor to improve its products reserves the right to change any information contained in this leaflet without prior

PRELIMINARY



TAG2525Z	Tension T : 400V 3~ 50Hz / 440V 3~ 60 Hz	R404A	N°127MU-T	Ind a
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Conditions d'annonce :	Gaz aspirés :	32°C
	Temp liquide :	32°C
Rating conditions	Return gas :	32°C
	Liquid temp :	32°C

50 Hz R404A

4 T condensation	5 T évaporation	(°C)	-30	-25	-20	-15	-10
55	1 P frigorifique	(W)	4018	5809	7506	9690	12113
	2 P absorbée	(W)	3206	3913	4653	5393	6149
	3 I absorbée	(A)	5.63	6.53	7.51	8.52	9.67

60 Hz R404A

4 T condensation	5 T évaporation	(°C)	-30	-25	-20	-15	-10
55	1 P frigorifique	(W)	5167	7054	9282	11949	14839
	2 P absorbée	(W)	4026	4925	5875	6941	7879
	3 I absorbée	(A)	5.99	7.10	8.27	9.44	10.75

1 = refrigerating capacity 2 = watt input 3 = current 4 = condensing temperature 5 = evaporating temperature

Nota : Les caractéristiques données dans cette fiche technique peuvent évoluer sans avis préalable, avec les améliorations que "TECUMSEH EUROPE" entend toujours apporter à sa production.

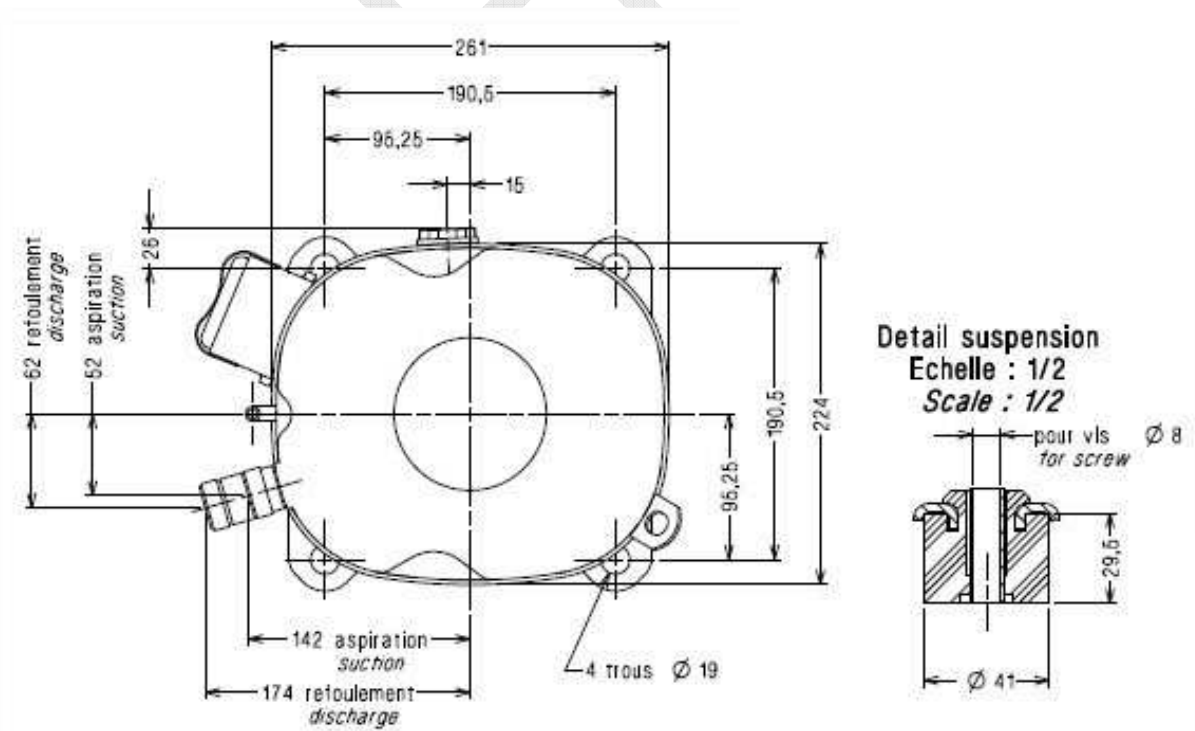
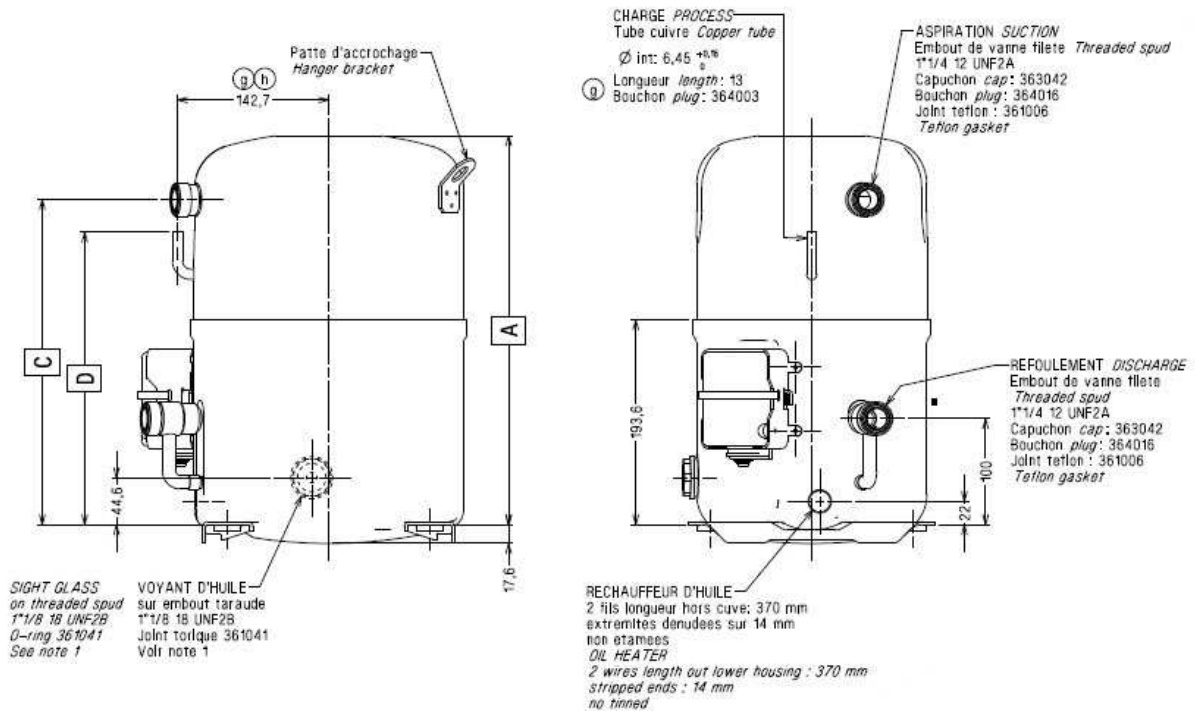
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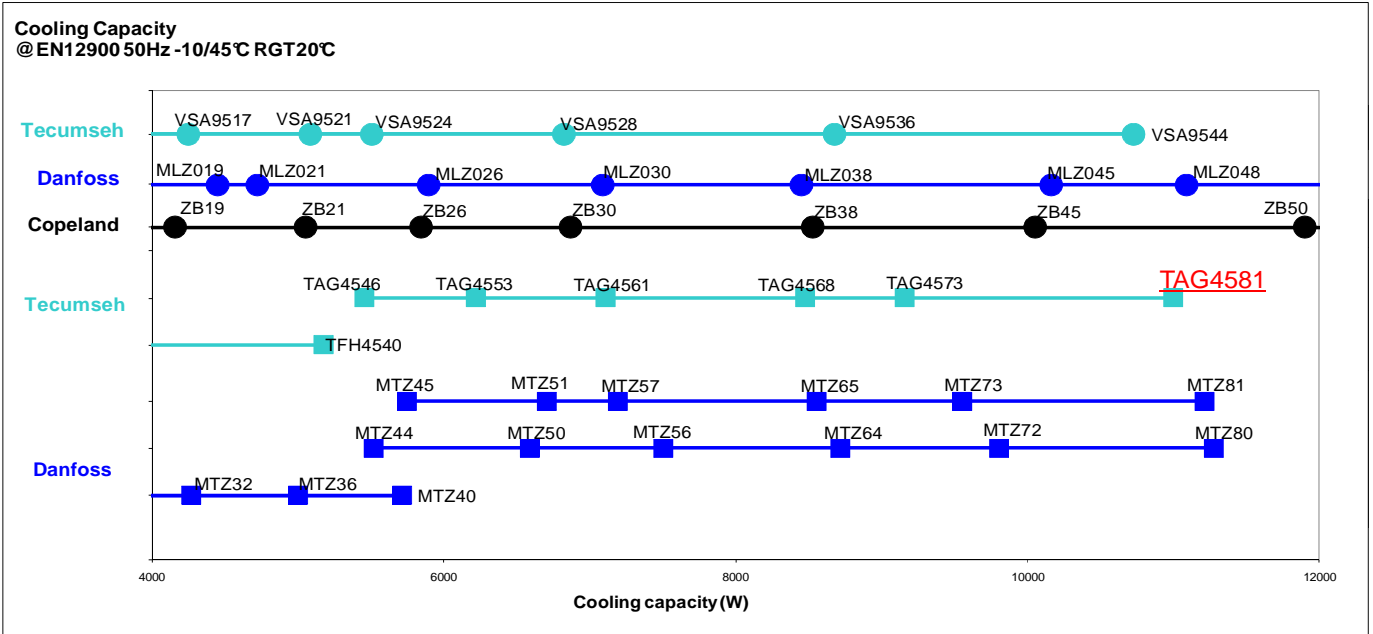


AG Outlines Drawings



AG Benchmark Positive Refrigeration

Commercial Positive Refrigeration



Positive refrigeration - R404A - EN 12900, evaporating T° -10°C / condensing T° 45°C / RGT 20°C													Tecumseh					Danfoss					Copeland				
Technologies	Families	Models	Cooling Capacity	Target cooling capacity	%	COP	Target COP	%	Weight	Technologies	Families	Models	Cooling Capacity	COP	Net weight	Technologies	Families	Models	Cooling Capacity	COP	Net weight						
Scroll	Tecumseh VSA	7	VSA9510Z	2339		1,64			35 kg	Piston	Danfoss MT	4	MTZ018-4	2041	1,69	21 kg	Scroll	Copeland Z	9	ZB15KCE	3320	1,82	26 kg				
Scroll	VSA	7	VSA9514Z	3145		1,59			36 kg	Piston	MTZ	4	MTZ022-4	2812	1,9	21 kg	Scroll	ZB	9	ZB19KCE	4160	1,98	28 kg				
Scroll	VSA	7	VSA9517Z	4247		2,01			35 kg	Piston	MTZ	4	MTZ028-4	3672	1,88	23 kg	Scroll	ZB	9	ZB21KCE	5050	2,01	29 kg				
Scroll	VSA	7	VSA9521Z	5085		2,1			35 kg	Piston	MTZ	4	MTZ032-4	4267	1,98	24 kg	Scroll	ZB	9	ZB26KCE	5840	1,98	28 kg				
Scroll	VSA	7	VSA9524Z	5505		2,08			36 kg	Piston	MTZ	4	MTZ036-4	5003	1,94	25 kg	Scroll	ZB	9	ZB30KCE	6870	2,05	36 kg				
Scroll	VSA	7	VSA9528Z	6823		2,12			52 kg	Piston	MTZ	4	MTZ040-4	5714	1,94	26 kg	Scroll	ZB	9	ZB38KCE	8530	2,03	38 kg				
Scroll	VSA	7	VSA9536Z	8676		2,19			55 kg	Piston	infoss MT	5	MTZ044-4	5520	1,75	35 kg	Scroll	ZB	9	ZB45KCE	10050	2,09	40 kg				
Scroll	VSA	7	VSA9544Z	10728		2,13			59 kg	Piston	MTZ	5	MTZ050-4	6591	1,83	35 kg	Scroll	ZB	9	ZB50KCE	11900	2,08	57 kg				
Piston	Tecumseh TFH	1	TFH4522Z	2617		1,69			30 kg	Piston	MTZ	5	MTZ056-4	7501	1,87	37 kg	Scroll	ZB	9	ZB58KCE	13300	2,11	57 kg				
Piston	TFH / TFHD	1	TFH4524Z	3048		1,75			30,4 kg	Piston	MTZ	5	MTZ064-4	8713	1,92	37 kg	Scroll	ZB	9	ZB66KCE	15100	2,13	60 kg				
Piston	TFH / TFHD	1	TFH4531Z	3968		1,85			31,2 kg	Piston	MTZ	5	MTZ072-4	9807	1,97	40 kg	Scroll	ZB	9	ZB76KCE	17850	2,19	61 kg				
Piston	TFH / TFHD	1	TFH4540Z	5173		1,79			33 kg	Piston	MTZ	5	MTZ080-4	11276	1,93	40 kg	Scroll	ZB	9	ZB95KCE	21700	2,07	65 kg				
Piston	TFH / TFHD	1	TFHD4548Z	6095		1,75			76,9 kg	Piston	foss MTZ	6	MTZ045-4	5749	2,07	35 kg											
Piston	TFH / TFHD	1	TFHD4580Z	10345		1,79			82 kg	Piston	MTZ	6	MTZ051-4	6703	2,08	35 kg											
Piston	TFH / TFHD	1	TFHD4562Z	7937		1,85			78 kg	Piston	MTZ	6	MTZ057-4	7189	2,05	37 kg											
Piston	Tecumseh TAG	2	TAG4546Z	5457	5800	6,29%	1,85	2,05	10,81%	44 kg	Piston	MTZ	6	MTZ065-4	8552	2,03	37 kg										
Piston	TAG / TAGD	2	TAG4553Z	6220	6500	4,50%	1,85	2,05	10,81%	45,6 kg	Piston	MTZ	6	MTZ073-4	9555	2,04	40 kg										
Piston	TAG / TAGD	2	TAG4561Z	7107	7200	1,31%	1,88	2,05	9,04%	46 kg	Piston	MTZ	6	MTZ081-4	11214	2	40 kg										
Piston	TAG / TAGD	2	TAG4568Z	8477	8600	1,45%	2	2,1	5,00%	47,2 kg	Piston	MTZ	9	MTZ100-4	13156	1,95	60 kg										
Piston	TAG / TAGD	2	TAG4573Z	9156	9500	3,76%	1,94	2,1	8,25%	48 kg	Piston	MTZ	9	MTZ125-4	16831	1,99	64 kg										
Piston	TAG / TAGD	2	TAG4580ZOpt	11000	11000		1,94	2,1	0,0825%	48 kg	Piston	MTZ	9	MTZ144-4	19816	2,03	67 kg										
Piston	TAG / TAGD	2	TAG4580ZOpt	11000			1,94				Piston	MTZ	9	MTZ160-4	21756	1,96	69 kg										
Piston	TAG / TAGD	2	TAGD4590Z	10915			1,85		104 kg	Scroll	Danfoss ML	8	MLZ015T4	3302	1,89	31 kg											
Piston	TAG / TAGD	2	TAGD4610Z	12440			1,85		109 kg	Scroll	MLZ	8	MLZ019T4	4451	2,06	31 kg											
Piston	TAG / TAGD	2	TAGD4612Z	14214			1,88		111 kg	Scroll	MLZ	8	MLZ021T4	4721	2,08	31 kg											
Piston	TAG / TAGD	2	TAGD4614Z	16954			2		113 kg	Scroll	MLZ	8	MLZ026T4	5896	2,09	31 kg											
Piston	TAG / TAGD	2	TAGD4615Z	18312			1,94		113 kg	Scroll	MLZ	8	MLZ030T4	7088	2,12	38 kg											
										Scroll	MLZ	8	MLZ038T4	8452	2,13	38 kg											
										Scroll	MLZ	8	MLZ045T4	10161	2,11	38 kg											
										Scroll	MLZ	8	MLZ048T4	11091	2,14	38 kg											
										Scroll	MLZ	8	MLZ058T4	12841	2,07	44 kg											
										Scroll	MLZ	8	MLZ066T4	15187	2,19	46 kg											
										Scroll	MLZ	8	MLZ076T4	17317	2,18	46 kg											

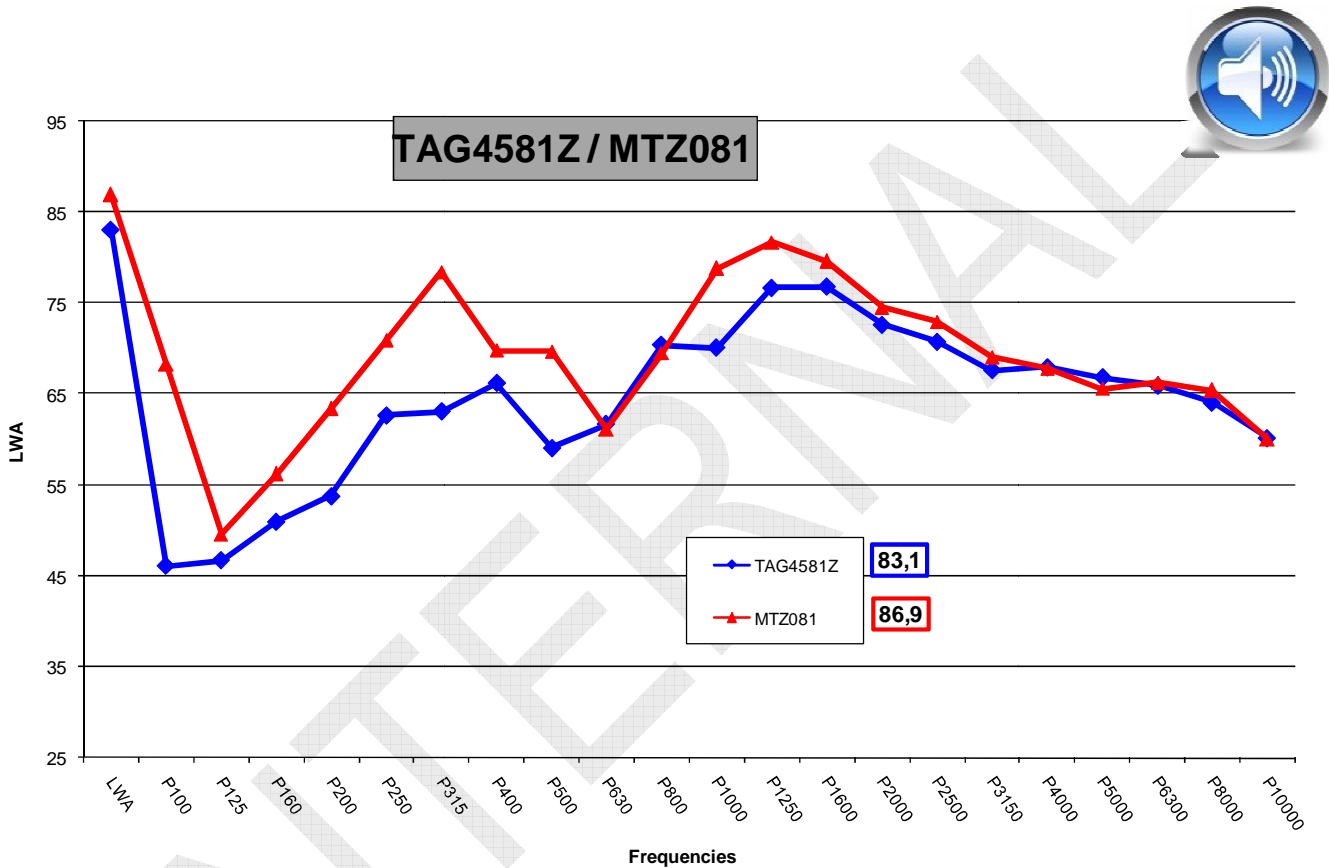
TAG4581Z allows to compete with the MTZ8081 of Danfoss.



AG Benchmark

TAG4581Z / MTZ081

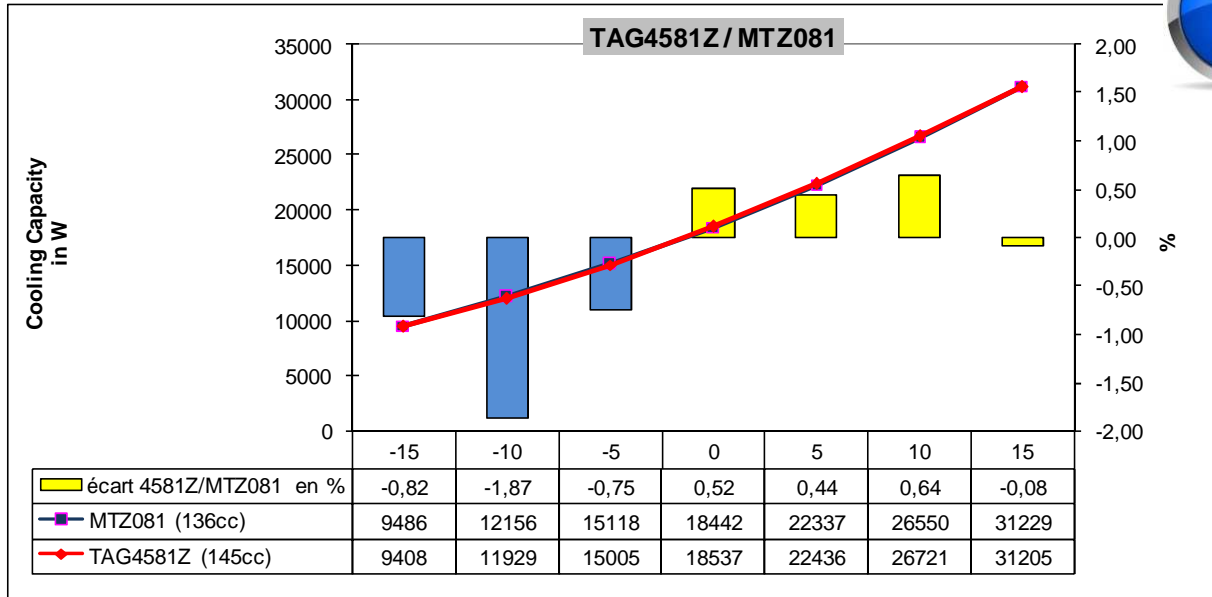
Sound Power Level Comparison: Danfoss / Maneurop



→ TAG 4581Z better acoustic level (-3 dBA) than the MTZ081

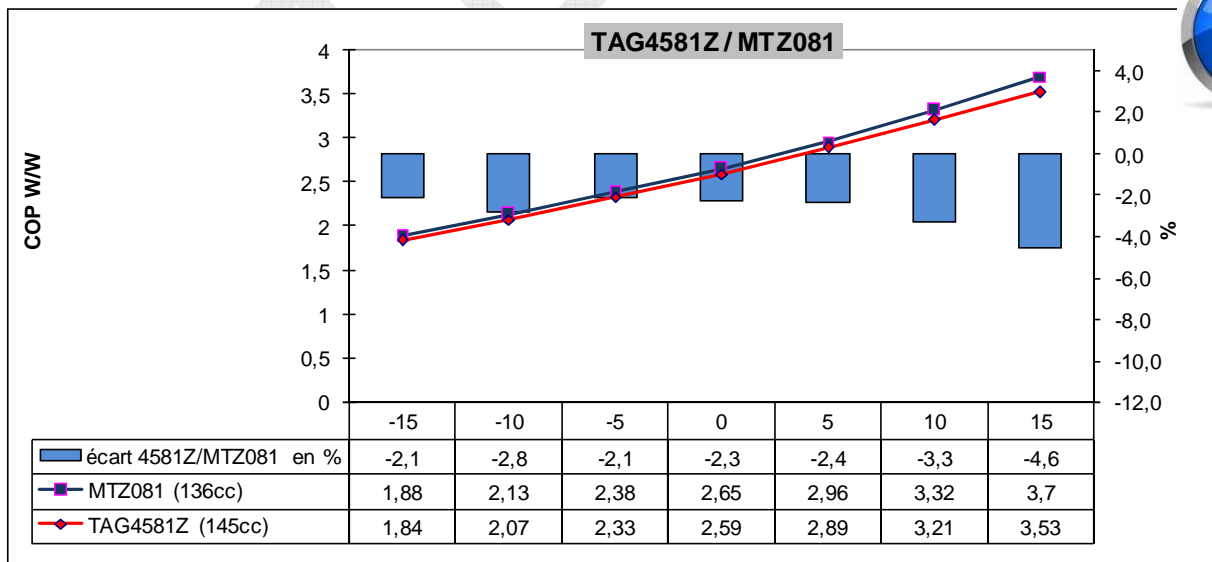
AG Benchmark TAG4581Z / MTZ081

Cooling Capacity Comparison



→ TAG 4581Z have the same cooling capacity than MTZ081

Energy Efficiency Comparison



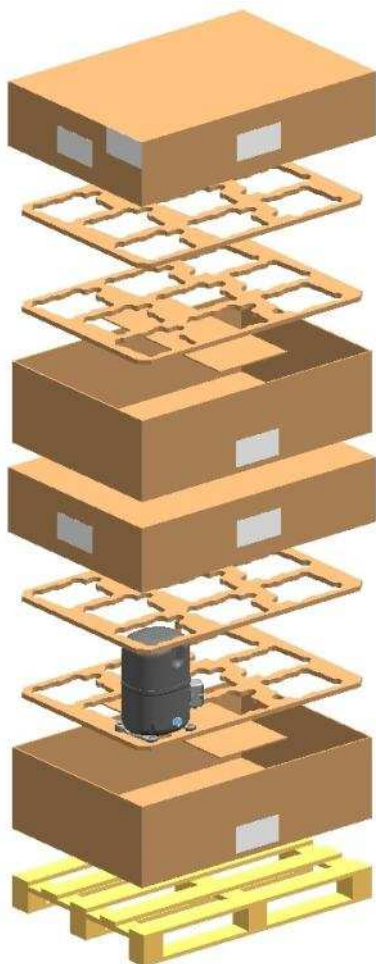
→ TAG 4581Z have similar efficiency of MTZ081

AG Multiple and Unitary Packaging

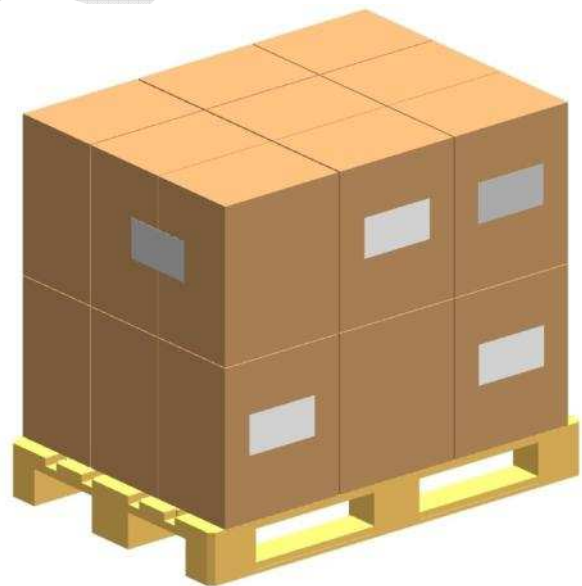
Number of layer per Pallet	Total Quantity per Pallet	Pallet Dimensions	Volume m ³
1	9	1125 x 800 x 570	0.513
2	18	1125 x 800 x 1005	0.905

→ Multiple and unitary have the same pallet quantity.

Multiple Packaging



Unitary Packaging



Marketing Tools

AG Hermetic Compressors Flyer

COMMERCIAL REFRIGERATION

AG HERMETIC COMPRESSORS

The AG range is expanding with 3 new models:

- FA251320 - **Positive refrigeration**
- FA251322 - **Negative refrigeration**
- FA251322 - **Negative refrigeration**

They are designed and assembled based on the values that built the reputation of the AG range. This family is well-known on the market for its reliability and durability.

Reliability for demanding applications
These compressors are widely renowned for their reliability and ability to operate in demanding or difficult applications that include defrosting on ice-making machines, or pull-down with start-up outside the evaporating range on milk tanks. AG compressors are a benchmark on the commercial refrigeration market.

Acoustics for greater comfort
Improving the compressor noise level is a priority for Tecumseh. The modifications made to the mechanics and quality of lubrication have reduced the noise level of AG compressors up to 5 dBA. These improvements make AG compressors among the quietest on the market.

Modularity for greater competitiveness
All compressors are suited to refrigerating systems with large power variations, which can operate with a central plant. AGP compressors are equipped as standard with an all right hand drive, with an equivalent connector equalizer coupling so that they can be installed easily and safely on the central plant, to be used and module the power.

Guaranteed Performance
As an active member of Assecum, Tecumseh guarantees the refrigeration performance level and energy efficiency level of its AG compressors. To this end, Tecumseh offers reliable and transparent information to customers and users, to reinforce trust in the solutions it provides. For its customers, this is also a competitive advantage in winning the trust of their own customers.

Powerful, Innovative, High-Performance
A technology you can count on

Hermetic Compressors Brochure

COMMERCIAL REFRIGERATION

HERMETIC COMPRESSORS

Powerful, Innovative, High-Performance
Technologies you can count on

Condensing Units Brochure

COMMERCIAL REFRIGERATION

CONDENSING UNITS

Standard, Customisable, Ready to Install
A tailor-made offer

Cross Reference [here](#)

CROSS REF

Find out the Cross Reference

Tool ergonomically and functionally helps you determine which Tecumseh compressor is equivalent to a competitive model.

Click on the link to the right for download.

- » OUTIL D'EQUIVALENCE COMPRESSEURS
- » EQUIVALENTS PROGRAM COMPRESSORS
- » VERGLEICHSLISTE VERDICHTER
- » LISTA DE EQUIVALENCIAS COMPRESORES
- » STRUMENTO DE EQUIVALENZA COMPRESSORI

Selection Software [here](#)

Logiciel de sélection - Compresseurs hermétiques et groupes de condensation.
Selection program - Hermetic compressors and condensing units.
Auswahlprogramm - Vollhermetische Verdichter und Verflüssigungssätze.
Programa de selección - Compresores herméticos y grupos de condensación.
Programma di selezione - Compressori ermetici e unità condensatrici.
Программа выбора - Герметичные компрессоры и агрегаты.
Program doboru - hermetyczne sprężarki i agregaty skraplające

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Selection software allows you to choose your product depending on its power and your application.

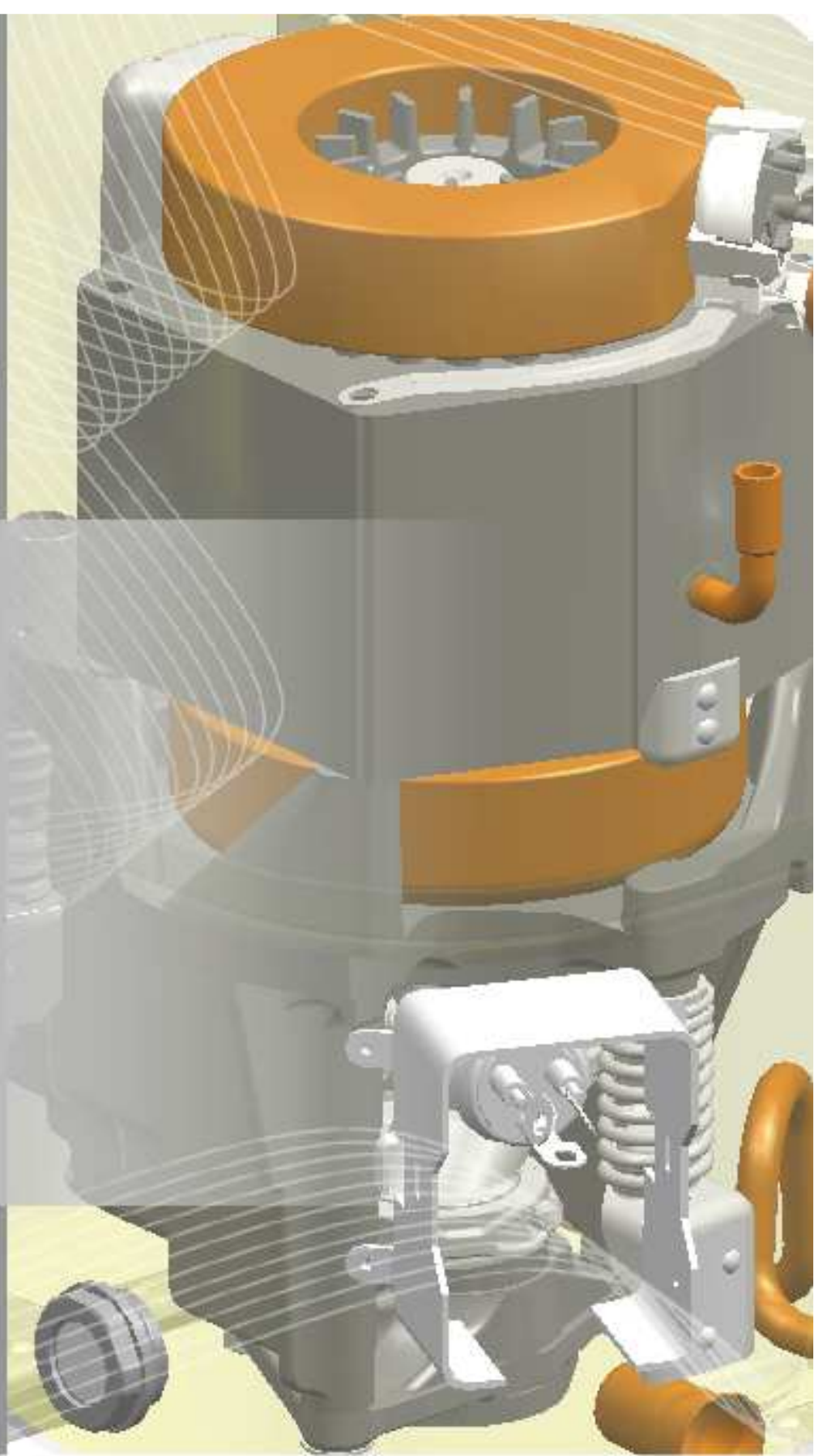
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