

Appendix 1 – CO2 visuals and cooler specs





PACK SYSTEMS
BUILT-IN
CONDENSER



www.ibscold.com

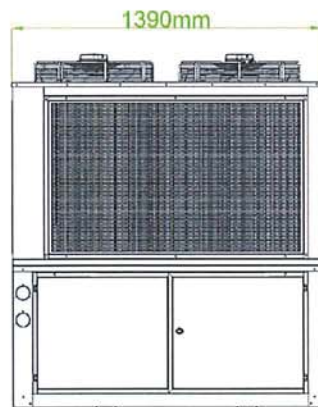
MIDIPACK CENTRAL SYSTEM

IMS-CM02-C0034F6



Ultra Silent Kit is Available
(Optional)

- Compatible for Supermarket Applications
- Ipss Integrated Electrical Panel
- Advanced System Control
- Compact Ergonomic Design
- Quality Equipment
- Compatible Condensers for Hot Environment
- High Security Equipment
- Extra Vibration Precautions
- Electrical Panels Compatible to The Standards
- Durable Cabinet for Outdoors



WEIGHT: 305 KG



COMPRESSOR

TYPE	Scroll
BRAND	Copeland
MODEL	ZB45KCE-TFD
PIECES	2
TOTAL NOMINAL POWER	12 HP
OIL TYPE	Ester 32
OIL CHARGE	3,8 l

CONDENSER

TYPE	Built-in
FIN	Aluminium
FIN SPACING	2,1 mm
HEAT TRANS. SURF. AREA	2 x 49,5 m ²

FAN

PIECES	2
DIAMETER	500 mm
SPEED	900 rpm
AIR FLOW	9.920 m ³ /h
VOLTAGE	1 phase
SOUND PRESSURE LEVEL	40 dBA @ 10 m

ELECTRICAL

VOLTAGE	380-420V/3Ph/50Hz
MAX OPERATING CURRENT	28,2 A
POWER	11 kW
OPERATING CURRENT	20,8 A

@-10°C/+45°C

- | | | |
|--|------------------------------|-------------------------|
| 1 Compressors (ZB45-KCE-TFD) | 14 Gas Flow Gauge (5/8") | 20 Fan Speed Controller |
| 2 Crankcase Heater | 15 Suction Line | 21 Acoustic Insulation |
| 3 Discharge Line Valve (1") | 16 Suction Line Valve | |
| 4 Discharge Line Vibration Absorber (5/8") | 17 HP Manometer (Optional) | |
| 5 Oil Separator (7/8") | 18 Pressure Control | |
| 6 Discharge Line | 19 LP Manometer (Optional) | |
| 7 Condenser Return Line | 20 Condenser | |
| 8 By-Pass Line Valve | 21 Axial Fan | |
| 9 Liquid Tank (21 Lt) | 22 Oil Tank (1 Galon) | |
| 10 Liquid Tank Outflow Valve | 23 Oil Filter (3/8") | |
| 11 Suction Line Accumulators | 24 Oil Level Regulator | |
| 12 Liquid Line Service Valve | 25 Pressure Control | |
| 13 Filter Drayer (5/8") | 26 Electrical Box | |

COOLING CAPACITY (Watt)

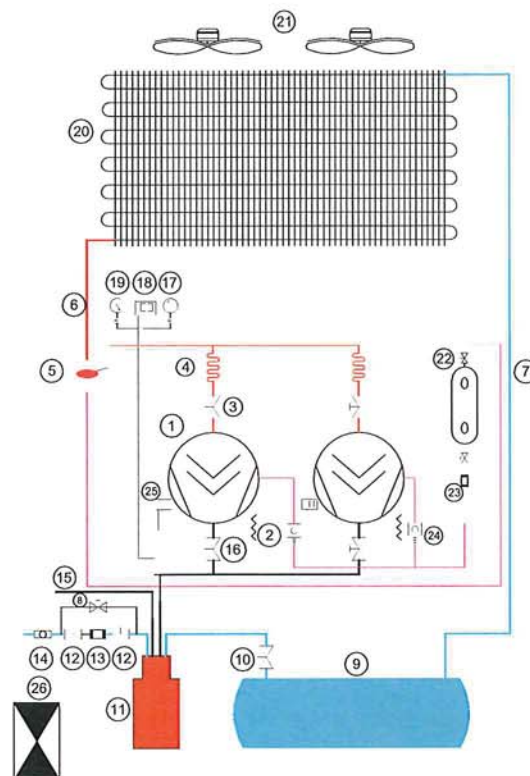
R 404 A

-5°C			-7°C			-10°C		
40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
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COOLING CAPACITY (Watt)

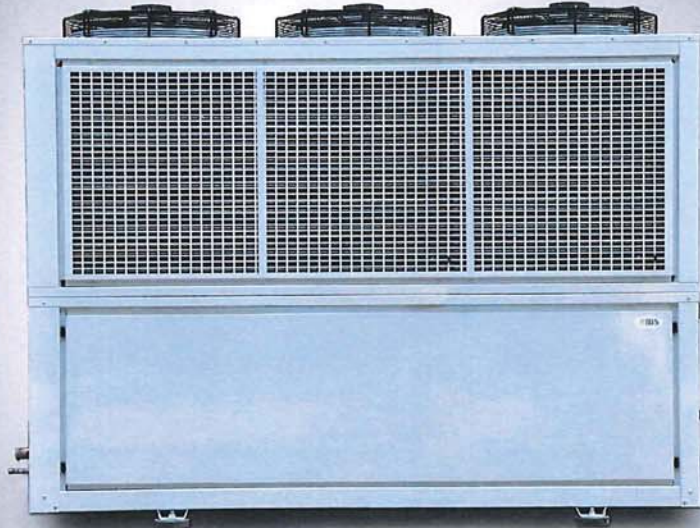
R 407 F

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40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
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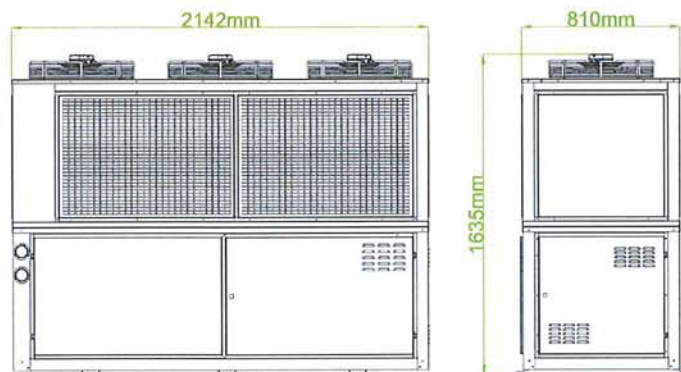
MIDIPACK CENTRAL SYSTEM

IMS-CM04-C0068F6



Ultra Silent Kit is Available
(Optional)

- Compatible for Supermarket Applications
- Ipss Integrated Electrical Panel
- Advanced System Control
- Compact Ergonomic Design
- Quality Equipment
- Compatible Condensers for Hot Environment
- High Security Equipment
- Extra Vibration Precautions
- Electrical Panels Compatible to The Standards
- Durable Cabinet for Outdoors



WEIGHT: 570 KG



COMPRESSOR

TYPE	Scroll
BRAND	Copeland
MODEL	ZB45KCE-TFD
PIECES	4
TOTAL NOMINAL POWER	24 HP
OIL TYPE	Ester 32
OIL CHARGE	7,6 l

CONDENSER

TYPE	Built-in
FIN	Aluminium
FIN SPACING	2,1 mm
HEAT TRANS. SURF. AREA	2 x 119 m ²

FAN

PIECES	3
DIAMETER	500 mm
SPEED	900 rpm
AIR FLOW	14.880 m ³ /h
VOLTAGE	1 phase
SOUND PRESSURE LEVEL	42 dBA @ 10 m

ELECTRICAL

VOLTAGE	380-420V/3Ph/50Hz
MAX OPERATING CURRENT	56 A
POWER	21 kW
OPERATING CURRENT	42 A
@-10°C/+45°C	

COOLING CAPACITY (Watt)

R 404 A

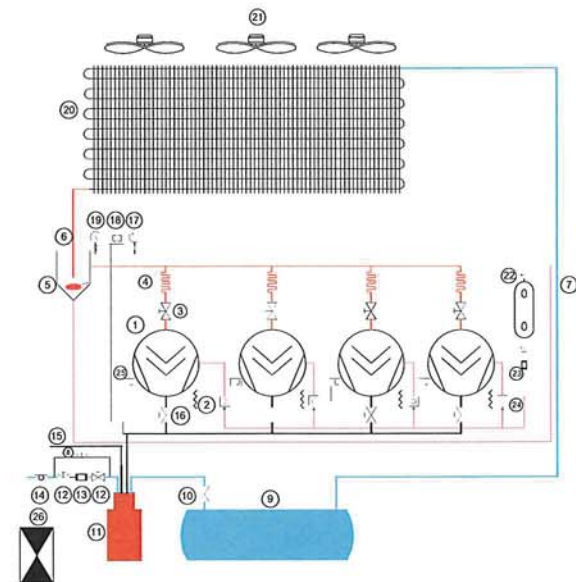
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40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
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COOLING CAPACITY (Watt)

R 407 F

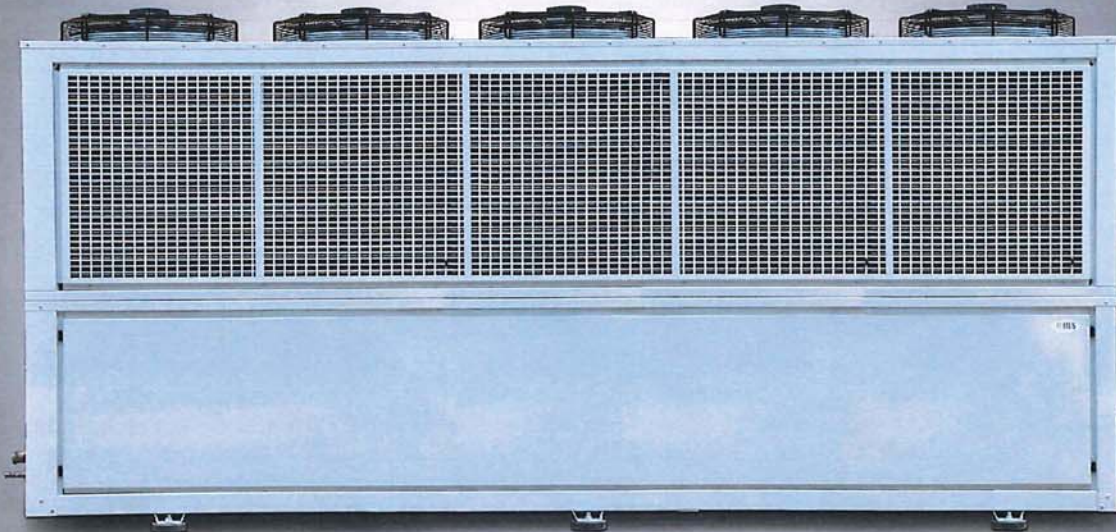
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40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
63400	59400	55000	52000	48400	44400	42000	38640	-

- | | |
|--|------------------------------|
| 1 Compressors (ZB45-KCE-TFD) | 15 Suction Line |
| 2 Crankcase Heater | 16 Suction Line Valve |
| 3 Discharge Line Valve (1") | 17 HP Manometer (Optional) |
| 4 Discharge Line Vibration Absorber (5/8") | 18 Pressure Control |
| 5 Oil Separator (1.3/8") | 19 LP Manometer (Optional) |
| 6 Discharge Line | 20 Condenser |
| 7 Condenser Return Line | 21 Axial Fan |
| 8 By-Pass Line Valve | 22 Oil Tank (2 Galon) |
| 9 Liquid Tank (35 Lt) | 23 Oil Filter (3/8") |
| 10 Liquid Tank Outflow Valve | 24 Oil Level Regulator |
| 11 Suction Line Accumulators | 25 Pressure Control |
| 12 Liquid Line Service Valve | 26 Electrical Box |
| 13 Filter Drayer (7/8") | - Fan Speed Controller |
| 14 Gas Flow Gauge (7/8") | - Acoustic Insulation |



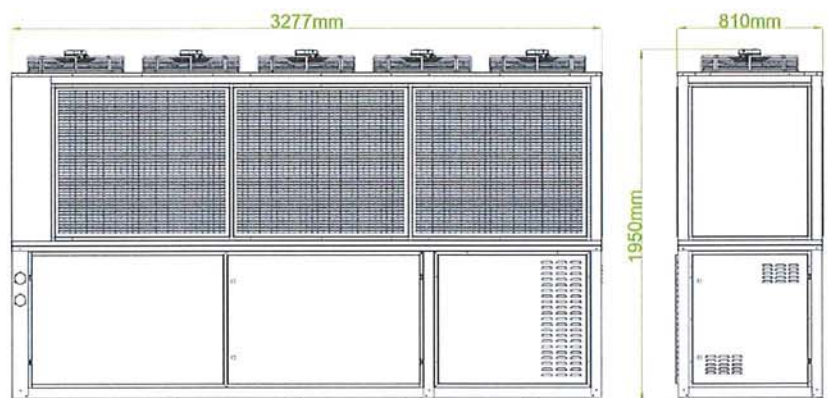
MIDIPACK CENTRAL SYSTEM

IMS-CM06-C0103F6



Ultra Silent Kit is Available
(Optional)

- Compatible for Supermarket Applications
- Ips Integrated Electrical Panel
- Advanced System Control
- Compact Ergonomic Design
- Quality Equipment
- Compatible Condensers for Hot Environment
- High Security Equipment
- Extra Vibration Precautions
- Electrical Panels Compatible to The Standards
- Durable Cabinet for Outdoors



WEIGHT: 925 KG



COMPRESSOR

TYPE	Scroll
BRAND	Copeland
MODEL	ZB45KCE-TFD
PIECES	6
TOTAL NOMINAL POWER	36 HP
OIL TYPE	Ester 32
OIL CHARGE	11,4 l

CONDENSER

TYPE	Built-in
FIN	Aluminium
FIN SPACING	2,1 mm
HEAT TRANS. SURF. AREA	2 x 197 m ²

FAN

PIECES	5
DIAMETER	500 mm
SPEED	900 rpm
AIR FLOW	24.800 m ³ /h
VOLTAGE	1 phase
SOUND PRESSURE LEVEL	45 dBA @ 10 m

ELECTRICAL

VOLTAGE	380-420V/3Ph/50Hz
MAX OPERATING CURRENT	87 A
POWER	32 kW
OPERATING CURRENT	64 A
@-10°C/+45°C	

COOLING CAPACITY (Watt)

R 404 A

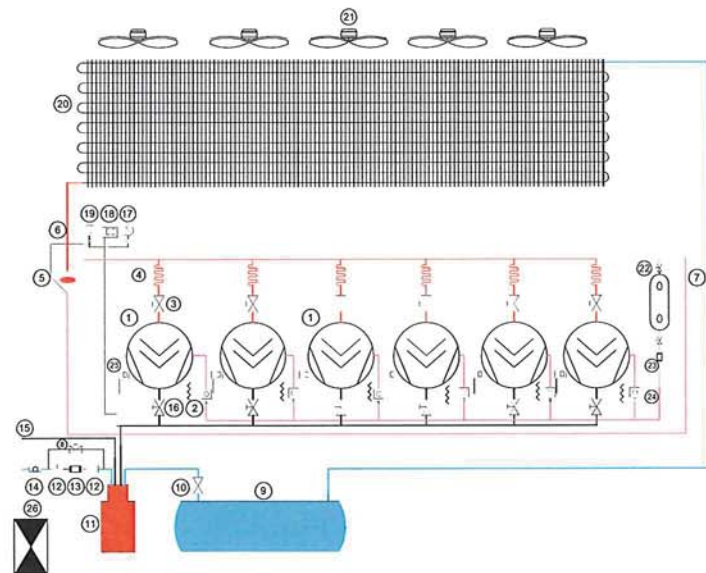
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40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
94200	86400	78600	78900	72600	65700	65700	60300	54720

COOLING CAPACITY (Watt)

R 407 F

-5°C			-7°C			-10°C		
40°C	45°C	50°C	40°C	45°C	50°C	40°C	45°C	50°C
95100	89100	82500	78000	72600	66600	63000	57960	-

- 1 Compressors (ZB45-KCE-TFD)
- 2 Crankcase Heater
- 3 Discharge Line Valve (1")
- 4 Discharge Line Vibration Absorber (5/8")
- 5 Oil Separator (1.5/8")
- 6 Discharge Line
- 7 Condenser Return Line
- 8 By-Pass Line Valve
- 9 Liquid Tank (40 Lt)
- 10 Liquid Tank Outflow Valve
- 11 Suction Line Accumulators
- 12 Liquid Line Service Valve
- 13 Filter Drayer (1.1/8")
- 14 Gas Flow Gauge (1.1/8")
- 15 Suction Line
- 16 Suction Line Valve
- 17 HP Manometer (Optional)
- 18 Pressure Control
- 19 LP Manometer (Optional)
- 20 Condenser
- 21 Axial Fan
- 22 Oil Tank (3 Galon)
- 23 Oil Filter (3/8")
- 24 Oil Level Regulator
- 25 Pressure Control
- 26 Electrical Box
- Fan Speed Controller
- Acoustic Insulation



CERTIFICATES

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証證書 ◆ CERTIFICADO ◆ CERTIFICAT



Attestation of Conformity

No.: 16-IS-1087-34-B / 01

Holder of Certificate: IBS Isıtma Soğutma Havalandırma Taahhüt Sanayi ve Tic. A.Ş

Dudullu Organize Sanayi Bölgesi 2.Cadde No:39 34776
Y. Dudullu / Ümraniye / İSTANBUL TURKEY

Product: Cooling Units

Model(s): Condensing Units (Split Type, Industrial Type)
Central System Cooling Units (Standard,
Economic, Screw, MiniPack, MidiPack, MaxiPack)
Chiller Units (MiniChill, MidiChill, MaxiChill,
UltraChill)

Parameters: Power Consumption: 0.5 – 250 kW
Voltage : 230 / 400 VAC
Frequency : 50 Hz
Weight : 30 – 2500 kg

**Product Tested
And Inspected
according to:** 2006/42/EC Machinery Directive
2006/95/EC Low Voltage Directive
EN ISO 12100
EN 60204-1

This Attestation of Conformity is issued on a voluntary basis according to Machinery Directive 2006/42/AT. It confirms that the listed equipment (not Annex IY equipment) complies with the principal protection requirements of the directive. It refers only to the particular sample and its technical documentation submitted for inspection.

Test Report No.: TGK – LTMP – 2017-01-036

Issue Date, 2017 – 01 - 24



After preparation of the necessary technical documentation as well as the conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

Page 1 of 1

TÜV SÜD Türkiye • TÜV SÜD Teknik Gözetlik ve Kalite Denetim Tic. Ltd Şti
Boşlukdere Cad. No:103/A Şişli – İstanbul / Türkiye

K03-E08-001,

TÜV SÜD Türkiye • Boşlukdere Cad. No: 103/A • Şişli İş Merkezi • A Blok Kat: 5 34394 Mecidiyeköy • İstanbul • Türkiye

TUV®



Industry Service

CERTIFICATE

The Certification Body of
TÜV SÜD Industrie Service GmbH,
a Notified Body of the Pressure Equipment Directive (PED),

certifies that

**IBS Isıtma Soğutma
Havalandırma Taah. San. ve Tic. A.Ş.
Dudullu Organize Sanayi Bölgesi 2.Cadde No:39
Yukarı Dudullu / Ümraniye/ İstanbul/ Turkey**

implemented, operates and maintains a quality
assurance system as described in the Pressure Equipment
2014/68/EU Annex III, Module D

for the scope of

**Manufacturing and assembly of cooling units
(Central System & Split Type Unit) with the following types:
ISC GRUP, EKONOMİK GRUP, İCU HM-CM GRUP,
İCU SM GRUP, İMC VOLYUZ / VOLYU GRUP,
PACK+SCROLL GRUP, PACK+SM GRUP, TS GRUP
with PS 30 bar and 33 bar pneumatic test**

acc. to EU-type examinations – production type (specified in attachment)

The audit with the report number Q-TR-PED-5010389662-001-16 proves
that the quality assurance system fulfils the PED requirements.

The manufacturer is authorized to provide the pressure equipment
produced within the scope of the assessed quality assurance system with
the following Notified Body number:

CE 0036

Certificate No.: DGR-0036-QS-1234-16

valid until November 29th, 2019
provided that annual surveillance audits have been performed successfully

Filderstadt, January 17th, 2017

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Germany

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Notified Body No.: 0036

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