

Fiche produit Motralec Ziehl Abegg FKDM AM C - fiche technique | Motralec

■ **DEMANDE DE PRIX RAPIDE** : <https://www.motralec.com/demandeContact>

Frequency inverters www.motralec.com / service-commercial@motralec.com / 01.39.97.65.10

Frequency inverters

3~ Fcontrol for compressor control inclusive group control



The 3~ Fcontrol frequency inverters with integrated all-pole effective sine filter are also available as special versions for controlling compressors in refrigerant technology. The integrated sine filter provides for operation of the compressor which is very kind on the motor. No shielded motor cables are required. The compressor is the component with the greatest energy requirement in the refrigerant circuit. The requirement-based control of this components brings considerable saving potential in comparison with the usual on and off switching operation. The frequency inverters are set as speed controllers for 0 – 10 V at the factory. The Fcontrol can autarchically control to the desired suction pressure in the plant optionally. For this we supply MBG pressure sensors with the measuring range -1 to +7 bar or 0 to 30 bar. Fcontrol are able to control up to four compressors with the function "group control". You need the IO add-on module Z-module-B for this application. This module expands the Fcontrol with the required in- and outputs.

Advantages achieved by Fcontrol frequency inverters are:

- High energy saving
- operation without shielded motor cables
- The cable length is not limited by the Fcontrol
- Operation without electromagnetic motor noises (ideal for noise sensitive areas)
- No danger to motors (these must not be suitable for frequency inverters) because they are supplied with sinusoidal voltage according to the mains voltage.

Input for sensors or speed settings through

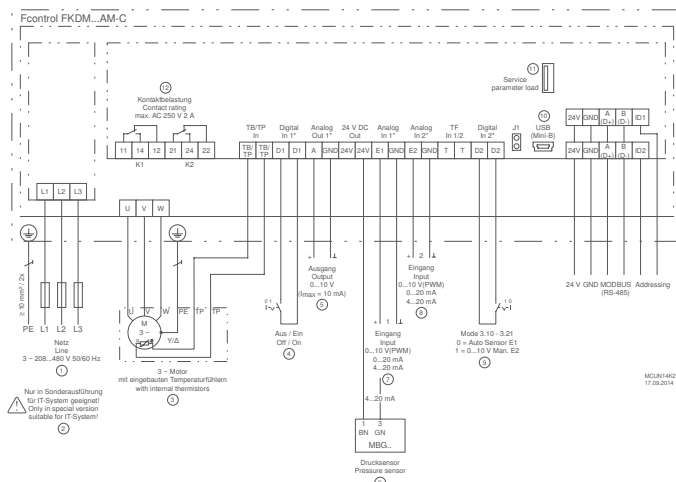


Setting of the desired speed through device or by external default, e.g. 0...10 V



Connection of pressure sensors (refrigerant)

Connection diagram



- ① Line
- ② Only suitable for IT system in special version!
- ③ 3~ motor with built-in thermostats
- ④ Off / On
- ⑤ Output
- ⑥ - ⑧ Input
- ⑨ Mode 3.10 - 3.21
- ⑩ USB interface
- ⑪ Addressing
- ⑫ Contact load

Interference emission according to EN 61000-6-3 (domestic)
Interference immunity according to EN 61000-6-2 (industrial)

Optional equipment

Add-on modules for frequency inverters

- IO add-on module type Z-Modul-B, Article No. **380052**

If the integrated inputs and outputs are not sufficient, other inputs and outputs can be created with the Z-Modul-B. These are also programmable:

- 1 analog input
- 1 analog output
- 3 digital inputs
- 2 digital outputs (relays)

- With the Z-Modul-B the rolling group control of compressors can be realized.

The first compressor, group 1, is controlled continuously. The other groups 2-4 are switched on and off alternating. Thereby the operation time of the different compressors is evenly spread.

- LON® Add-on module type Z-Modul-L, Article No. **380086**

For integration into a bus system LON® by a two-wire

Integrated all-pole effective sinefilter

Phase to phase and phase to protective earth. Thus sinusoidal output voltage. Frequency inverter typical measures such as shielded motor cables are not necessary.

LC multi-function display with plain text display:

Different menu languages can be selected

Simple start-up by operating modes:

Typical operating modes for the compressor control can be selected.

Simple programmability:

Typical settings can easily be made: e.g. minimum speed setting, limitation of the maximum speed, inversions and limits. Setting, e.g. for 2-step mode

2 analog inputs for sensors or setting signals:

analog input E1 and E2: Setting by operating modes or manually programmable, e.g. 0-10 V, 0-20 mA, 4-20 mA

2 digital inputs D1 and D2:

Programmable, e.g. enable, switch over setpoint 1 or 2, switch over control or manual mode, output limitation, display of external fault, reset

1 analog output A1:

Setting by operating modes or manually programmable, e.g. output signal proportional to modulation, output signal proportional to input signal, invertible, 10 V constant voltage, group control

2 digital outputs (relays) K1 and K2:

Setting by operating modes or manually programmable, e.g. operating indication, fault indication, limits, external fault at digital input, group control etc.

Integrated motor protection function:

Connection possibility for PTC thermistors or alternatively thermostats (TB or TP).

Interface RS485 MODBUS RTU:

Integration into bus system

Set protection / memory for settings:

Activation of set protection against unauthorised access, restoration of made settings

Event memory:

Querying of occurred events, operating times etc.

Fcontrol, compressor control with display

3~ 208...480V 50/60Hz

Type	Article no.	Rated voltage	Rated current	Rated temperature	Max. line fuse	Max. heat dissipation	Maximum ambient temperature	Protection class	Weight	Dimensions (W x H x D)
		V	A	°C	A	W	°C		kg	mm
FKDM5AM-C	308344	400	5	50	10	100	55	IP54	7.20	250 x 302 x 195.5
FKDM8AM-C	308345		8	50	10	150	55		7.90	250 x 302 x 195.5
FKDM12AM-C	308346		12	55	16	270	55		8.70	250 x 302 x 195.5
FKDM18AM-C	308347		18	40	20	440	55		14.20	280 x 355 x 239
FKDM22AM-C	308348		22	40	25	520	55		14.50	280 x 355 x 239
FKDM32AM-C	308353		32	50	35	700	55		29.60	386 x 525 x 283
FKDM40AM-C	308351		40	50	50	790	55		29.60	386 x 525 x 283
FKDM50AM-C	308352		50	50	63	910	55		32.80	386 x 525 x 283

Devices with a rated temperature below 55 °C can be used up to 55 °C with a reduction in performance.

Besoin d'un prix ou d'un conseil technique ?

Ventilateur Ziehl Abegg FKDM AM C



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- Plus de 200 000 références et 30 marques distribuées
- Vente, réparation, bobinage et SAV en atelier
- Livraison partout en France, accompagnement avant et après-vente

Voir la gamme Ziehl Abegg sur notre site :

www.motralec.com/.../ziehl-abegg

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