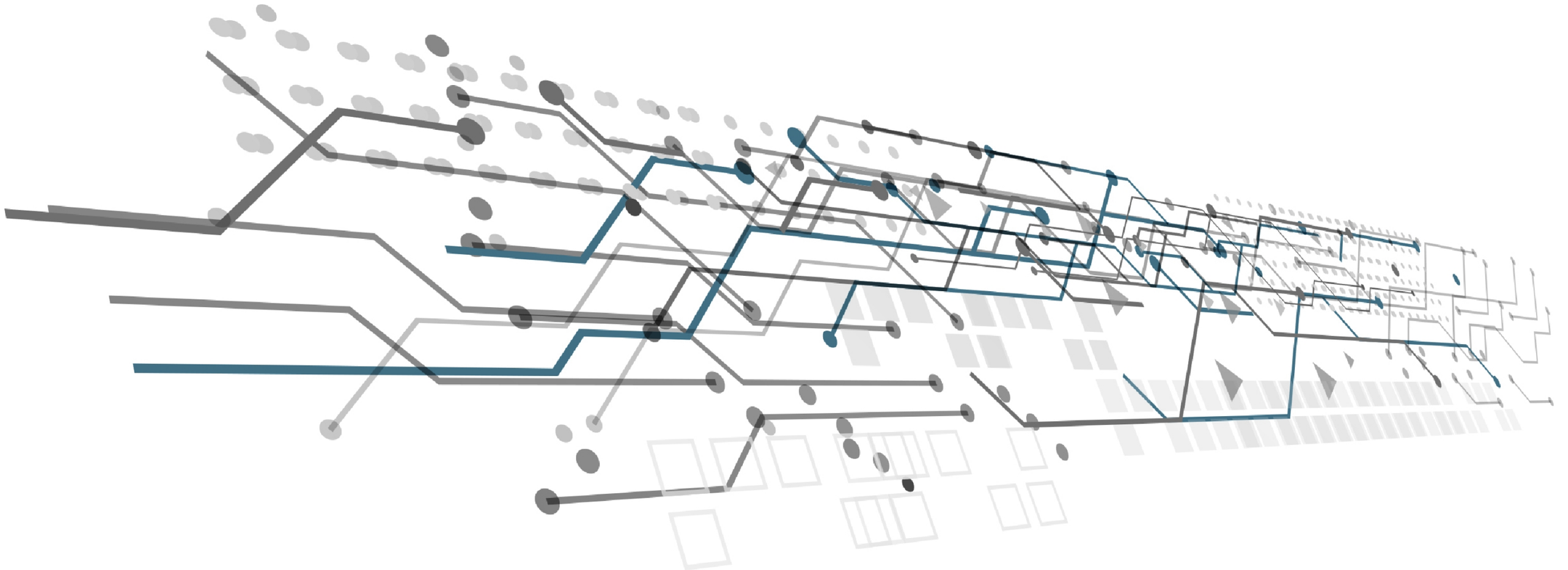
VEX1000 Wiring diagram

Without controller
Ohne Regler
Sans contrôleur



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Soler&Palau Ventilation Group

EXHAUSTO

VEX1000 - Without controller

3006832

Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor:	DKTSA	Page:	1
		Revision date:	26-08-2026	Approved by:	DKBP	Previous page:	0
Drawing number: 3006832	Page Title: Project information	Revision:	B	Scale:	1:1	Next page:	2
		Replaces revision:	A	Format:	A3	Pages in total:	12

Page	Title (en)	Titel (de)	Titre (fr)	Last edit
1	Project information	Projektinformationen	Informations sur le projet	26-08-2026
3	Standards	Standard	Normes	27-11-2024
10	Swiss Rotors Fans - 1 phase	Swiss Rotors Ventilatoren - 1-phasig	Ventilateurs Swiss Rotors - Monophasés	17-03-2026
11	Swiss Rotors Fans - 3 phase	Swiss Rotors Ventilatoren- 3-phasig	Ventilateurs Swiss Rotors - Triphasés	02-12-2024
20	Ziehl-Abegg Fans - 3 phase	Ziehl-Abegg Ventilatoren - 3-phasig	Ventilateurs Ziehl-Abegg - Triphasés	04-03-2025
30	Klingenburg Rotary Heat Exchangers	Klingenburg Rotationswärmetauscher	Échangeur de chaleur rotatif Klingenburg	27-03-2025
40	Belimo Dampers - 2-10V	Belimo Luftklappen - 2-10V	Volet d'air Belimo - 2-10V	03-12-2024
41	Belimo Dampers - Modbus	Belimo Luftklappen - Modbus	Volet d'air Belimo - Modbus	04-12-2024

Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor:	DKTSA	Page:	2
		Revision date:	26-08-2026	Approved by:	DKBP	Previous page:	1
Drawing number: 3006832	Page Title: Table of Contents	Revision:	B	Scale:	1:1	Next page:	3
		Replaces revision:	A	Format:	A3	Pages in total:	12

Abbreviations of colours (according to IEC 60757)			
Black	Schwarz	Noir	BK
Brown	Braun	Brun	BN
Red	Rot	Rouge	RD
Orange	Orange	Orange	OG
Yellow	Gelb	Jaune	YE
Green	Grün	Vert	GN
Blue	Blau	Bleu	BU
Light Blue	Hellblau	Bleu clair	BU
Violet	Violett	Violet	VT
Gray	Grau	Gris	GY
White	Weiß	Blanc	WH
Pink	Rosa	Rose	PK
Green/Yellow	Grün/Gelb	Vert/Jaune	GNYE
Light-	Hell-	-clair	LT-

Abbreviations of power and signals			
Phase	Phase	Phase	L
Neutral	Neutral	Neutre	N
Protective Earth	Schutzerde	Terre protectrice	PE
Positive	Positiv	Positif	+
Negative	Negativ	Négatif	-
Voltage	Spannung	Tension	V
Current	Strom	Courant	A
Power	Leistung	Puissance	W
Analog Input	Analogeingang	Entrée analogique	AIN
Analog Output	Analogausgang	Sortie analogique	AOU
Digital Input	Digitaler Eingang	Entrée numérique	DIN
Digital Output	Digitaler Ausgang	Sortie numérique	DOU
Ground	Masse	Masse	GND

Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor: DKTSA	Page: 3
		Revision date:	26-08-2026	Approved by: DKBP	Previous page: 2
Drawing number: 3006832	Page Title: Standards	Revision:	B	Scale: 1:1	Next page: 10
		Replaces revision:	A	Format: A3	Pages in total: 12

Circuit diagrams

Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor:	DKTSA	Page:	Circuit diagrams
		Revision date:	26-08-2026	Approved by:	DKBP	Previous page:	3
Drawing number: 3006832	Page Title: Circuit diagrams	Revision:	B	Scale:	1:1	Next page:	10
		Replaces revision:	A	Format:	A3	Pages in total:	12

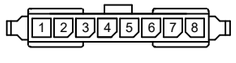
1x230 VAC, 50-60 Hz

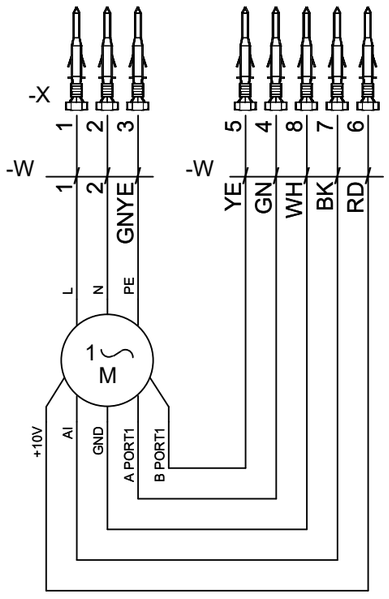
Main Supply

Type	Pin	Colour
L	1	BN
N	2	BU
PE	3	GNYE

Control Interface

Type	Pin	Colour	Description
A (TX+)	4	GN	RS485 -A MODBUS RTU
B (TX-)	5	YE	RS485 -B MODBUS RTU
10V	6	RD	Output 10 VDC
AIN	7	BK	Analog input 0-10 VDC; R>1 kΩ
GND	8	WH	I/O Ground

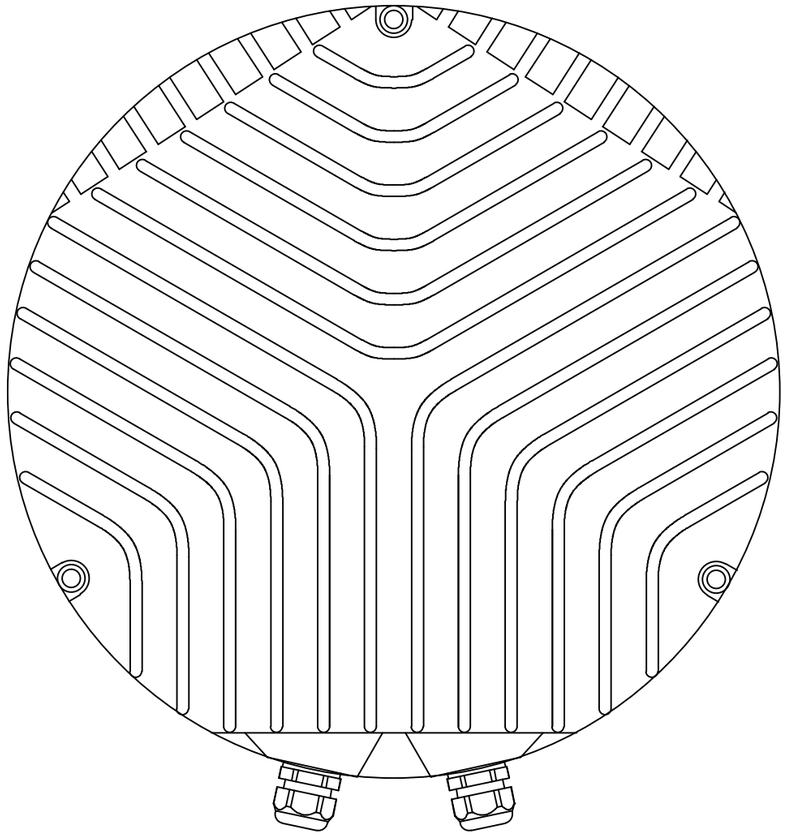




Supply data (50Hz)

Model	Voltage	Current	Power	MCB	Fan
EMEA-SR-FS-A-225	1x230V	3,0A	349W	1P C4A	Metallic
EMEA-SR-FS-P-225	1x230V	3,0A	349W	1P C4A	Plastic
EMEA-SR-FS-A-250	1x230V	3,5A	349W	1P C4A	Metallic
EMEA-SR-FS-P-250	1x230V	3,5A	349W	1P C4A	Plastic

For further information and data sheets, see the manufacturer's website.



Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date: 19-11-2024	Constructor: DKTSA	Page: 10
		Revision date: 26-08-2026	Approved by: DKBP	Previous page: 3
Drawing number: 3006832	Page Title: Swiss Rotors Fans - 1 phase	Revision: B	Scale: 1:1	Next page: 11
		Replaces revision: A	Format: A3	Pages in total: 12

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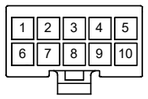
3x400 VAC, 50-60 Hz

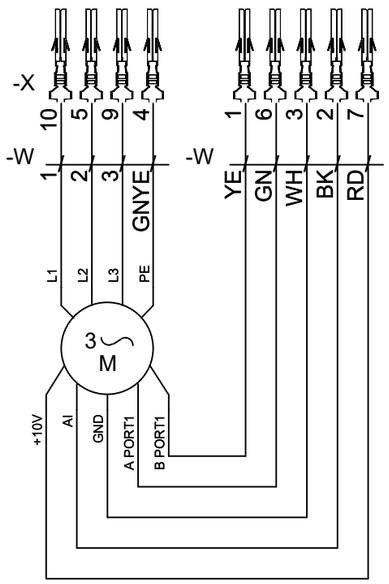
Main Supply

Type	Pin	Colour
L1	10	BK
L2	5	BN
L3	9	BU
PE	4	GNYE

Control Interface

Type	Pin	Colour	Description
A (TX+)	6	GN	RS485 -A MODBUS RTU
B (TX-)	1	YE	RS485 -B MODBUS RTU
10V	7	RD	Output 10 VDC
AIN	2	BK	Analog input 0-10 VDC; R>1 kΩ
GND	3	WH	I/O Ground

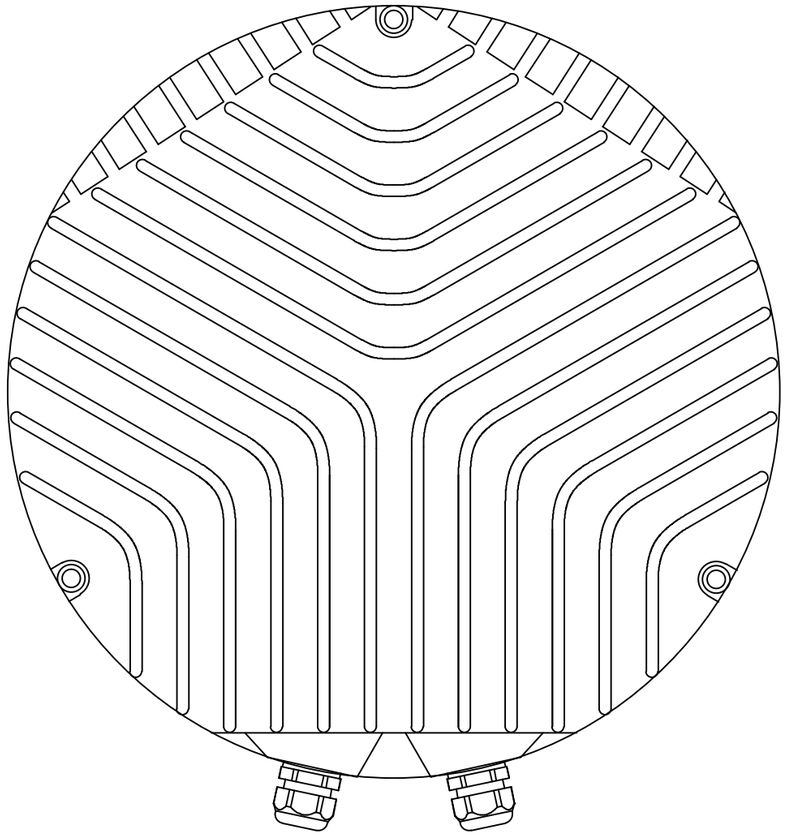




Supply data (50Hz)

Model	Voltage	Current	Power	MCB	Fan
EMEA-SR-FS-A-315	3x400V	2,9A	1500W	3P C4A	Metallic
EMEA-SR-FS-P-315	3x400V	2,9A	1500W	3P C4A	Plastic
EMEA-SR-FS-A-355	3x400V	2,4A	1600W	3P C4A	Metallic
EMEA-SR-FS-A-355	3x400V	3,6A	2500W	3P C6A	Metallic
EMEA-SR-FS-A-355	3x400V	5,4A	3700W	3P C6A	Metallic
EMEA-SR-FS-A-500	3x400V	5,1A	3700W	3P C6A	Metallic
EMEA-SR-FS-A-500	3x400V	7,1A	5400W	3P C10A	Metallic

For further information and data sheets, see the manufacturer's website.



Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date: 19-11-2024	Constructor: DKTSA	Page: 11
		Revision date: 26-08-2026	Approved by: DKBP	Previous page: 10
Drawing number: 3006832	Page Title: Swiss Rotors Fans - 3 phase	Revision: B	Scale: 1:1	Next page: 20
		Replaces revision: A	Format: A3	Pages in total: 12

0	1	2	3	4	5	6	7	8	9

3x230/3x400 VAC, 50-60 Hz

Main Supply

Type
L1
L2
L3
PE

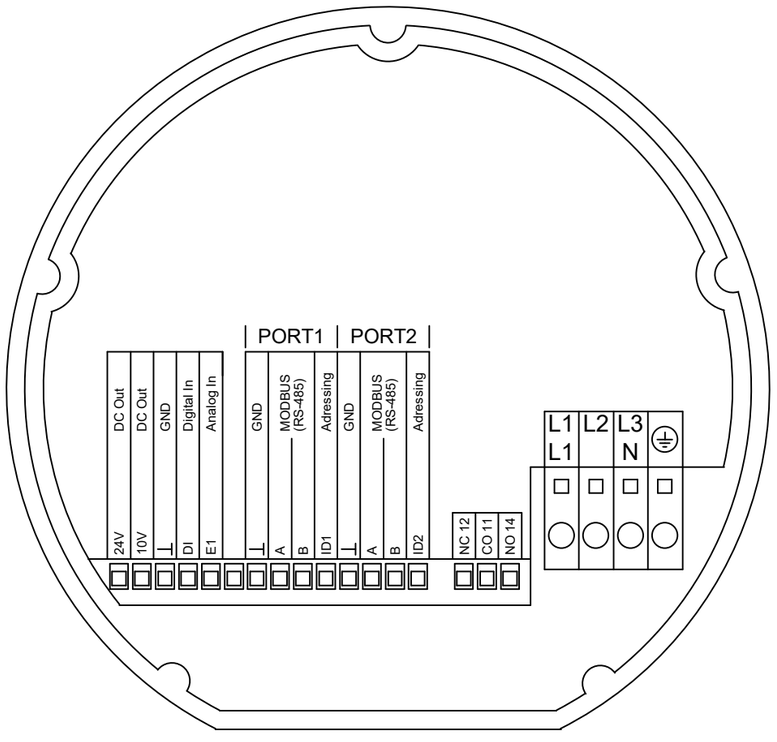
Control Interface

Type	Description
A (TX+)	RS485 -A MODBUS RTU
B (TX-)	RS485 -B MODBUS RTU
10V	Output 10 VDC
AIN	Analog input 0-10 VDC; R>1 kΩ
GND	I/O Ground

Supply data (50Hz)

Model	Voltage	Current	Power	MCB	Fan
GR31I-ZID.DC.CR	3x230V	5,8A	1850W	3P C6A	Plastic
GR35I-ZID.DC.CR	3x230V	5,8A	1850W	3P C6A	Plastic
GR50I-ZID.GG.CR	3x230V	10,5A	3500W	3P C16A	Plastic
GR40C-ZID.DG.1R	3x400V	4,6A	2900W	3P C6A	Metallic
GR35I-ZID.DC.CR	3x400V	4,0A	2500W	3P C6A	Plastic
GR40I-ZID.DC.CR	3x400V	3,4A	2100W	3P C4A	Plastic
GR50I-ZID.GG.CR	3x400V	5,6A	3500W	3P C6A	Plastic

For further information and data sheets, see the manufacturer's website.



Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date: 19-11-2024	Constructor: DKTSA	Page: 20
		Revision date: 26-08-2026	Approved by: DKBP	Previous page: 11
Drawing number: 3006832	Page Title: Ziehl-Abegg Fans - 3 phase	Revision: B	Scale: 1:1	Next page: 30
		Replaces revision: A	Format: A3	Pages in total: 12

1x230 VAC, 50-60 Hz, max fuse 10A

Main Supply

Type	Pin	Colour
L	L	BN
N	N	BU
PE	PE	GNYE

Motor Supply

Type	CW	CCW	Colour
L1	U	U	BN
L2	W	V	BK
L3	V	W	BU
PE	PE	PE	GNYE

Control Interface Modbus

Type	Pin	Description
A (TX+)	3	RS485 -A MODBUS RTU
B (TX-)	4	RS485 -B MODBUS RTU
GND	5	I/O Ground

Control Interface 0-10V

Type	Pin	Description
GND	1	I/O Ground
AIN	2	Analog input 0-10 VDC
12V	6	Output 12 VDC

Motor size setting

Type	DIP 1	DIP 2	Power
1 Nm	ON	ON	27,5W
2 Nm	OFF	OFF	55,0W
4 Nm	ON	OFF	100W
8 Nm	OFF	ON	220W

Max. Speed setting

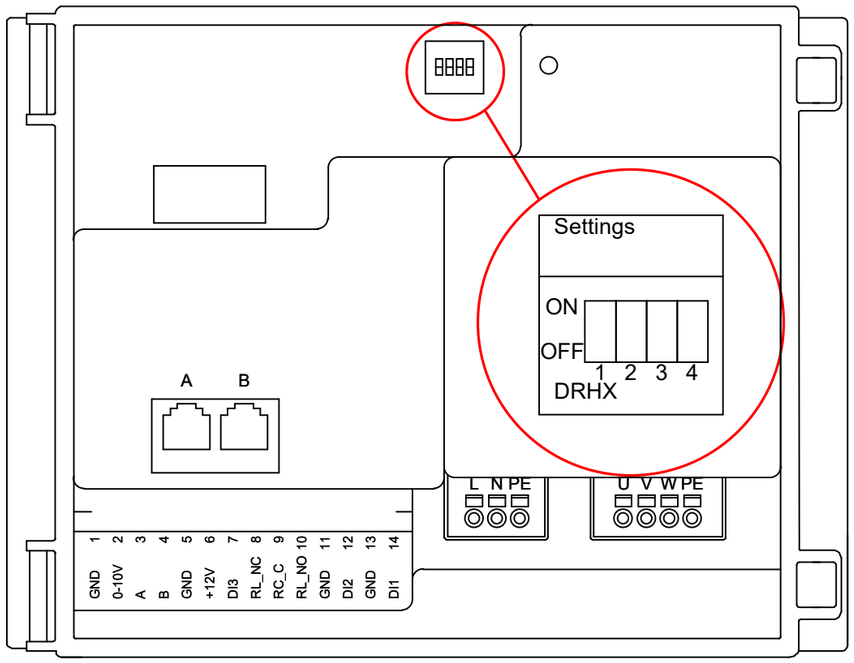
Type	DIP 3	DIP 4
Speed 1	OFF	OFF
Speed 2	ON	OFF
Speed 3	OFF	ON
Speed 4	ON	ON

All drives and controllers are of type 3P04N & 1220-MAD5, with the exception of the following configurations:

AHU	Rotary heat exchanger	Storage mass	STEP-Drive KL-MRHX	Controller KL- DRHX
VEX1005	RRU(ECO)-P-E14-492/570/290-434	Condensation	3P02N	1055-MAD5
VEX1005	RRU(ECO)-K-E14-492/570/290-434	Epoxy-coated	3P02N	1055-MAD5
VEX1010	RRU(ECO)-P-E14-772/570/290-520	Condensation	3P02N	1055-MAD5
VEX1010	RRU(ECO)-K-E14-772/570/290-520	Epoxy-coated	3P02N	1055-MAD5
VEX1060	RRU(ECO)-N-E14-1371/1245/290-1195	Sorption	3P08N	1220-MAD5
VEX1065	RRU(ECO)-N-E14-1371/1347/290-1297	Sorption	3P08N	1220-MAD5
VEX1080	RRU(ECO)-N-E14-1539/1448/290-1398	Sorption	3P08N	1220-MAD5

All rotors are delivered from Klingenburg with the correct settings for the respective heat exchanger.

For further information and data sheets, see the manufacturer's website.



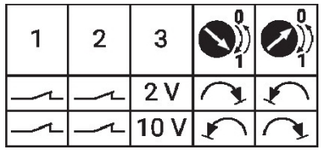
Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor:	DKTSA	Page:	30
		Revision date:	26-08-2026	Approved by:	DKBP	Previous page:	20
Drawing number: 3006832	Page Title: Klingenburg Rotor	Revision:	B	Scale:	1:1	Next page:	40
		Replaces revision:	A	Format:	A3	Pages in total:	12

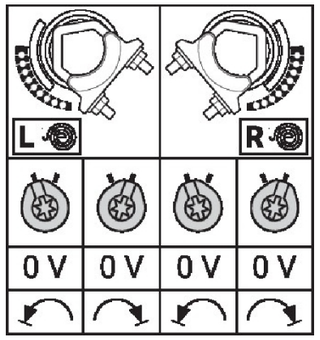
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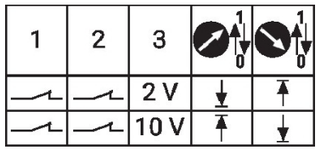
Belimo 2-10V controlled dampers

Control Interface 2-10V

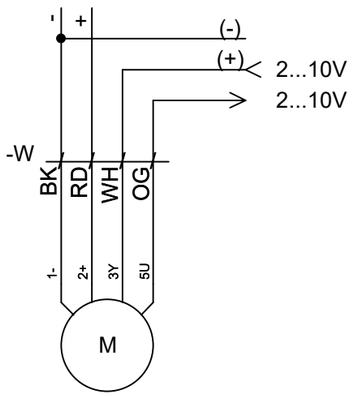
Function	Colour	Wire no.
- (AC/DC 24V)	BK	1
+ (AC/DC 24V)	RD	2
2...10V IN	WH	3
2...10V OUT	OG	5

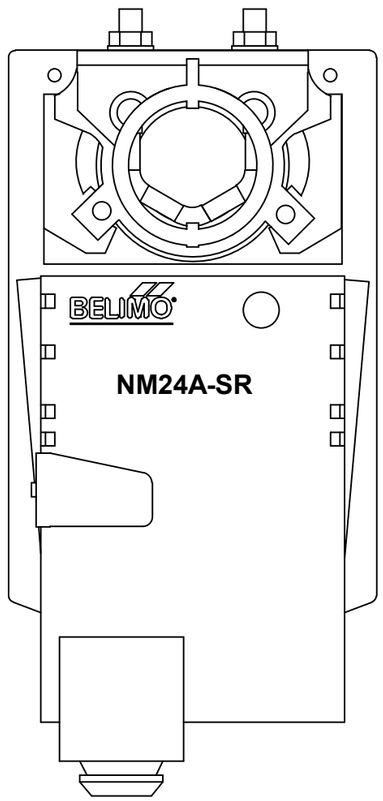




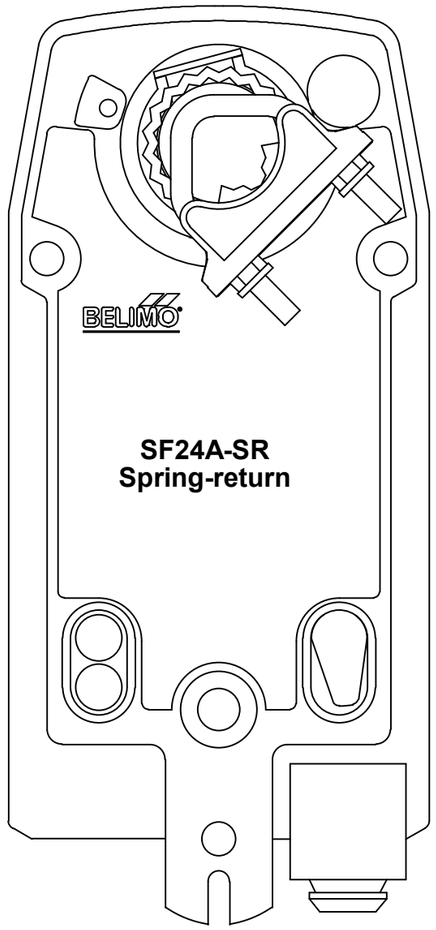


For further information and data sheets, see the manufacturer's website.

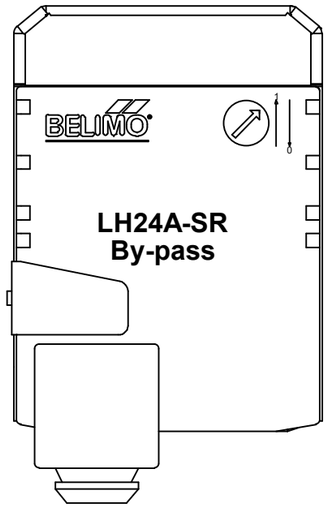




NM24A-SR



SF24A-SR
Spring-return



LH24A-SR
By-pass

Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date: 19-11-2024	Constructor: DKTSA	Page: 40
		Revision date: 26-08-2026	Approved by: DKBP	Previous page: 30
Drawing number: 3006832	Page Title: Belimo Dampers - 2-10V	Revision: B	Scale: 1:1	Next page: 41
		Replaces revision: A	Format: A3	Pages in total: 12

0	1	2	3	4	5	6	7	8	9

Belimo Modbus controlled dampers

Control Interface Modbus

Function	Pin	Colour	Wire no.
-	1	BK	1
+	2	RD	2
Not used	3	WH	3
Not used	4	OG	5
A	5	PK	6
B	6	GY	7

Modbus ID

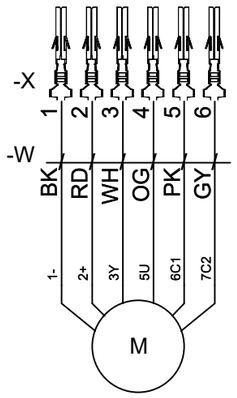
Function	ID
Outdoor air	130
Exhaust air	131
Mixing air	132
Bypass air	133
Supply air	135
Extract air	136

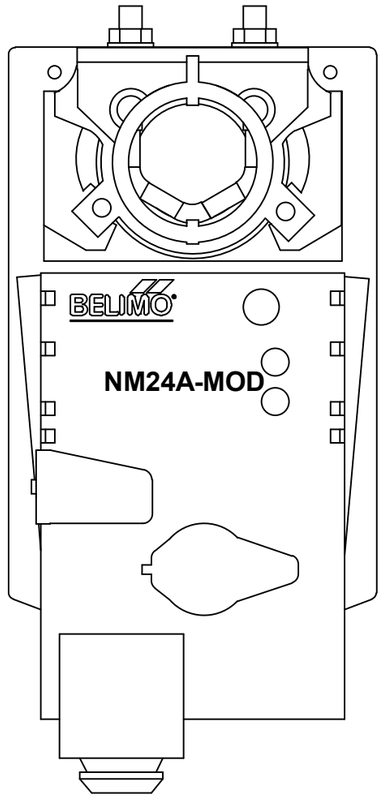
Modbus default settings

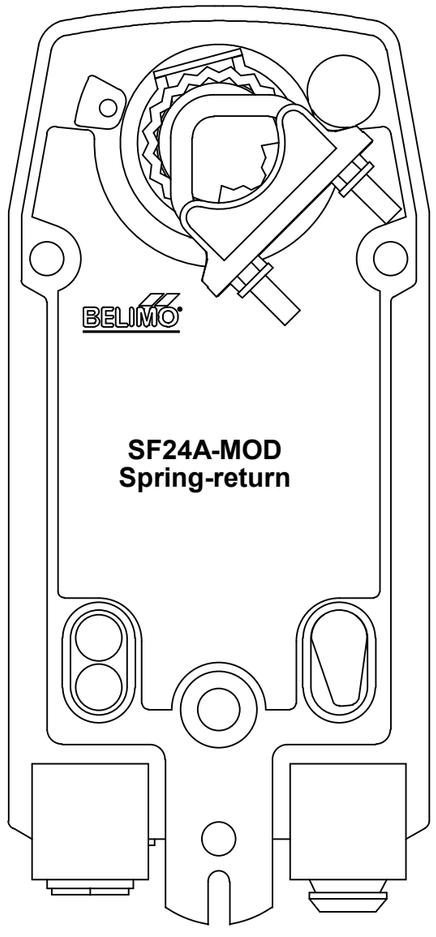
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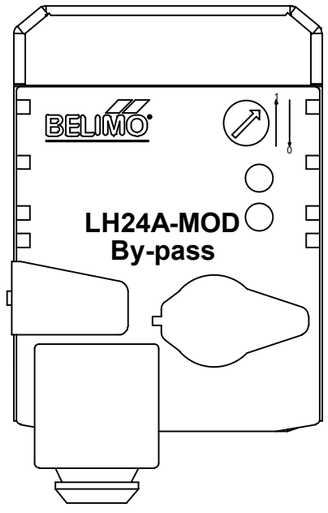
For further information and data sheets, see the manufacturer's website.











Manufactured by: EXHAUSTO	Project: VEX1000 - Without controller	Start date:	19-11-2024	Constructor: DKTSA	Page: 41
		Revision date:	26-08-2026	Approved by: DKBP	Previous page: 40
Drawing number: 3006832	Page Title: Belimo Dampers - Modbus	Revision:	B	Scale: 1:1	Next page: .
		Replaces revision:	A	Format: A3	Pages in total: 12

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