Phase speed controllers

Title	Article No.
TGRT 1	PRGR0029
TGRT 2	PRGR0032
TGRT 3	PRGR0034
TGRT 4	PRGR0035
TGRT 5	PRGR0036
TGRT 7	PRGR0037
TGRT 11	PRGR0030
TGRT 14	PRGR0031

Title	Article No.
TGRV 1.5	PRGR0045
TGRV 2	PRGR0041
TGRV 3	PRGR0042
TGRV 4	PRGR0043
TGRV 5	PRGR0039
TGRV 7	PRGR0044
TGRV 11	PRGR0038
TGRV 14	PRGR0040

Title	Article No.
TGRT 1Ex	PRGR0067
TGRT 2Ex	PRGR0033
TGRT 3Ex	PRGR0068
TGRT 4Ex	PRGR0069
TGRT 5Ex	PRGR0070
TGRT 7Ex	PRGR0071
TGRT 11Ex	PRGR0072
TGRT 14Ex	PRGR0073

Transformer controllers are designed to change motor rotating speed by changing voltage. All controllers are with motors and transformers thermo protection function. 3 phase controllers are with power supply fault protection. Once power supply is recovered, controller does not switch on previous step, until it is switched OFF and On to required step. Steps have fixed voltage and are switched by rotary knob. Controllers also have power indication led. All controllers have 230 VAC output for connection servo motors, actuators, heaters relays and etc. To one controller more than one motor can be connected, if total current of all controllers is less than maximum controller current. In this case all motors thermo protections must be connected in series.

Marking TGR a b c

a	V – 1x230 VAC, T – 3x400 VAC.
b	Max. current [A]
c	ex – for explosion proof motors
	Controllers conform with LST EN 600335-1:2003+A11:2004+A1:2005+A12:2006+A2:2007 standards and are CE marked.

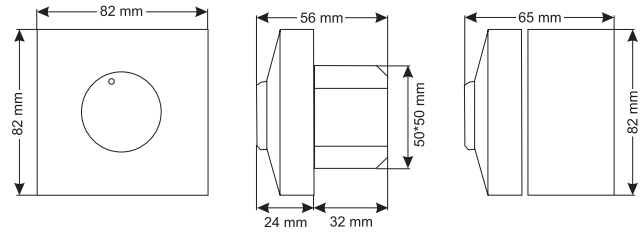
Technical data

Type	Max. current (A)	Dimensions	Weight (kg)	Enclosure (P -plastic, M – metal)	Type	Max. current (A)	Dimensions	Weight (kg)	Enclosure (P -plastic, M – metal)
TGRV 1,5	1,5	178x155x99	2,6	P	TGRT 1/1ex	1	335x245x133	6,3	P
TGRV 2	2	178x155x99	3,0	P	TGRT 2/2ex	2	335x245x133	8,1	P
TGRV 3	3	178x155x99	3,5	P	TGRT 3/3ex	3	335x245x133	10,7	P
TGRV 4	4	178x155x150	4,4	P	TGRT 4/4ex	4	335x245x133	14,6	P
TGRV 5	5	178x155x150	4,9	P	TGRT 5/5ex	5	300x290x160	18,7	M
TGRV 7	7	244x184x178	7,3	P	TGRT 7/7ex	7	365x320x190	24,7	M
TGRV 11	11	244x184x178	9,5	P	TGRT 11/11ex	11	365x320x190	34,1	M
TGRV 14	14	244x184x178	10,4	P	TGRT 14/14ex	14	365x320x190	37,2	M

Technical data 1. 5 steps motor rotation speed controller. 2. Power supply: 1x230 VAC – TGRV.., 3x400 VAC – TGRT ..(ex). 3.Frequency [Hz]: 50-60Hz. 4. Steps voltage: TGRV.. - 80V Imax*0.6, 120V Imax*0.9, 140V Imax*1, 170V Imax*1, 230V Imax*1. TGRT.. - 130V Imax*0.9, 170V Imax*1, 220V Imax*1, 270V Imax*1, 400V Imax*1. 5. Protection class IP44. 6. Max. ambient temperature 40°C. 7. Max. controller temperature 70°C is limited by transformer thermo protection. Max. possible transformers temperature T=130°C-ambient temperature.

ETY / MTY-4 / MTP010

Single phase speed controller



Title	Article No.
ETY-1,5	PRGR0020
ETY-2,5	PRGR0021
MTY-4	PRGR0024
MTP010	PRGR0025

ETY/MTY-4
Manual regulation of speed or airflow of voltage controllable (230 Vac, 50 Hz) motors and fans. Several motors can be connected as long as the current limit is not exceeded. These speed-controllers offer an excellent and accurate regulation. The moisture resistant casing (with the possibility to be mounted internally or externally) allows the regulator to be used in humid conditions.

MTP010
Regulator is intended for the devices with the input voltage of 0–10V and the output voltage of +10V. Desired output voltage can be set from 0V up to 10V using the rotating knob. The regulator can be switched on and off using the existing additional function. The moisture resistant casing (with the possibility to be mounted internally or externally) allows the regulator to be used in humid conditions.

Technical data

Model	ETY1,5	ETY2,5	MTY4
Supply	**~1, 230, 50 Hz**		
Current rating (A)	0,1 - 1,5 A	0,2 - 2,5 A	0,4 - 4 A
Current fuse (A) (5*20 mm)	F2,0A-H	F3,15A-H	M5,00A-H
IP	44/54	44/54	54
Control	full	full	full
Weight	200g	235g	325g
Mounting	inset/surface		surface

All models have an extra (not regulated) 230 V output. The models 0,5 till 2,0 A are suitable for inset and for surface mounting. Model 4,0 A ccan be used only for surface mounting.
Directive 2006/95/EC on low voltage.
Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2001 (Modified))
Amendment A11:2004 to EN 60335-1:2002
Amendment A1:2004 to EN 60335-1:2002 (IEC 60335-1:2001/A1:2004)
Amendment A12:2006 to EN 60335-1:2002
EN 60669-1:1999
Switches for household and similar fixed-electrical installations — Part 1: General requirements (IEC 60669-1:1998 (Modified))
Amendment A1:2002 to EN 60669-1:1999 (IEC 60669-1:1998/A1:1999 (Modified))
EN 60669-2-1:2004
Switches for household and similar fixed electrical installations — Part 2- 1: Particular requirements — Electronic switches (IEC 60669-2-1:2002 (Modified))
EMC:
Directive 2004/108/EC relating to electromagnetic compatibility

Technical data

Model	MTP010
Supply (VDC)	+10 V
Resistance value	10 kΩ
Output	0-10 VDC
Switch rating	4 A/250VAC, 10A/12VDC
IP	44
Control	full
Dimensions (WxHxL)	82x82x65
Weight	145g

Controllers coply with requirements of standards LVD 2006/95/EC, EMC 2004/108/EC, EN61000-6-3, EN 61000-6-2.

The company reserves the right to make changes of technical data without prior notice

Frequency inverters

Title	Article No.
ODE-3-120023-1F12	ZAKD079
ODE-3-120043-1F12	ZAKD080
ODE-3-120070-1F12	ZAKD081
ODE-3-220105-1F42	ZAKD083
ODE-3-140022-3F12	ZAKD089
ODE-3-240058-3F42	ZAKD092
ODE-3-140041-3F12	ZAKD090
ODE-3-240095-3F42	ZAKD093
ODE-3-340140-3F42	ZAKD094

Frequency inverters are utilized for ventilators' speed control. They are compact in size, easy to use and have good compatibility with other devices.
Functions:
• EMC filter.
• Ground-fault protection during running.
• Analog control from -0V to 10V.
• Built-in PID control.
• Built-in dynamic braking circuit.
• Built-in 485 communication.

Technical data

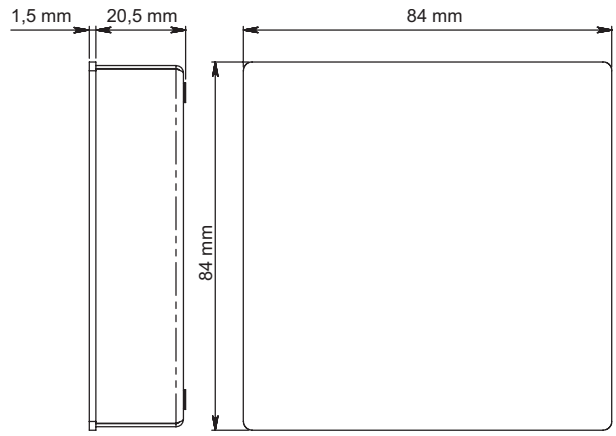
Type	ODE-3-120023-1F12	ODE-3-120043-1F12	ODE-3-120070-1F12	ODE-3-220070-1F42	ODE-3-220105-1F42	ODE-3-320153-1042
Power Rating, kW	0,37	0,75	1,5	1,5	2,2	4
Supply Voltage, V	1 Ph. Input, 200 – 240V ± 10%					
Supply frequency, Hz	48 – 62Hz					
Output voltage, V	3 Ph. Output, 200-240V					
Output current, A	2,3	4,3	7	7	10,5	15,3
Output frequency, Hz	0 – 500Hz, 0.1Hz resolution					
Internal EMC Filter	Yes	Yes	Yes	Yes	Yes	No
Ambient temperature (operating)	-10 to 50 °C					
Ambient humidity	95% Max, non condensing					
Ingress Protection	IP20					
Communication	Modbus RTU; CANopen					
Internal Brake Transistor	No	No	No	Yes	Yes	Yes

Technical data

Type	ODE-3-120023-3012	ODE-3-120043-3012	ODE-3-120070-3012	ODE-3-220070-3F42	ODE-3-220105-3F42	ODE-3-320180-3F42
Power Rating, kW	0,37	0,75	1,5	1,5	2,2	4
Supply Voltage, V	3 Ph. Input, 200 – 240V ± 10%					
Supply frequency, Hz	48 – 62Hz					
Output voltage, V	3 Ph. Output, 200-240V					
Output current, A	2,3	4,3	7	7	10,5	18
Output frequency, Hz	0 – 500Hz, 0.1Hz resolution					
Internal EMC Filter	No	No	No	Yes	Yes	Yes
Ambient temperature (operating)	-10 to 50°C					
Ambient humidity	95% Max, non condensing					
Ingress Protection	IP20					
Communication	Modbus RTU; CANopen					
Internal Brake Transistor	No	No	No	Yes	Yes	Yes

STOUCH

Remote controller



Title	Article No.
Stouch	PRGPU051

Stouch controllers specially designed for easy control of Salda Air handling units.

› No complex features: ideal for facilities with occasional or novice users (e.g. hotels, offices, schools and etc.);
› 4 configurable speeds (indicated pressure or velocity as a percentage);
› Boost function;
› On/Off function;
› Display of fan speed;
› Display of warnings;
› Constant pressure control with external pressure sensor;
› Carbon dioxide level control with external CO2 sensor;
› Modbus master/slave modes.
› One-touch sensory control, sound response;
› LED and digital indication;
› Sleep mode;
› Blocking of turn off;
› Child lock.

Technical data		
Supply voltage	[VDC]	24VDC ± 10% / 24VAC ± 10%
Communication line		RS-485
Dimensions (WxHxL)	[mm]	84x84x22
Protection class		IP30
Ambient temperature	[°C]	10 to 40
Ambient humidity	[%]	10-80 (non-condensing)

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