Foreword / Remarks

Electric Band Heaters as shown in this catalogue are for use in electric motors. They prevent in cold environment damage and the occurrence of condensate caused by frost. Types as shown are our standards. In our scope of supply we have one standard type electively with and without glass silk insulation and two versions for use in hazardous areas.

Customized versions in respect to power, heater band length and voltage are possible on request

1. Electric Band Heater

1.1 Electric Band Heater type EM Heat xx zGS

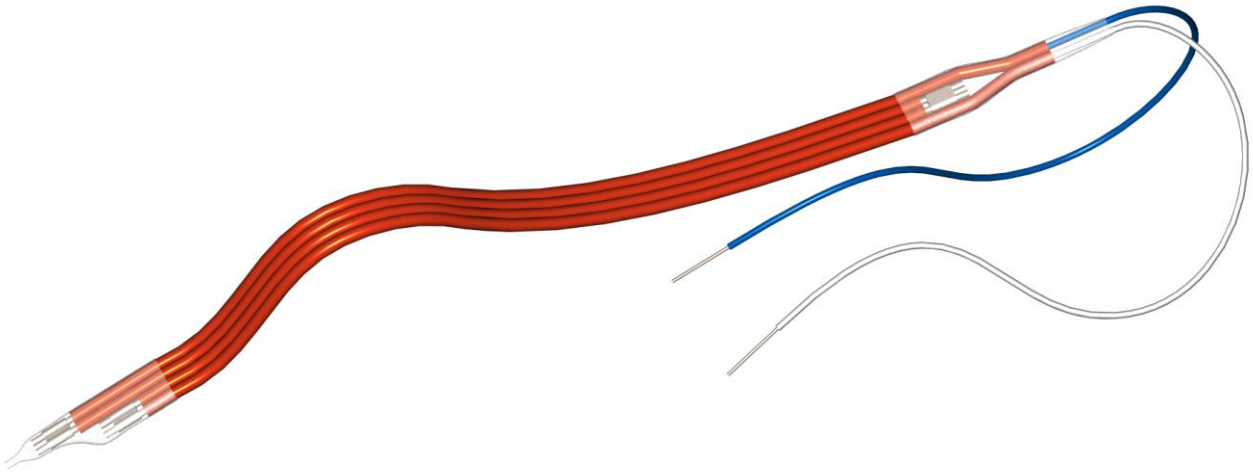


Fig. 1: EM-Heat 27W oGS - 230V –0,29 - 500

Specification	Electric band heater EM-Heat xx zGS	
Order code:	*EM-HEAT xx zGS - U - HL - KL*	
	xx =	power in [W]
	z =	m with
	z =	o without
	GS =	glass silk tube
	U =	operating voltage [V]
	HL =	length of the heating band [m]
	KL =	length of the supply line [mm]
Construction	Resistance wire of CuNi or NiCr alloy looped on glass silk according to DIN 0254, with silicon insulated. Electively with or without additional glass silk insulation Fix connected supply line insulated with Teflon.	
Insulation heating wire	Silicone	

Dimension	mGS	oGS
width*)	approx. 11mm	approx. 9.5mm
height*)	approx. 3.5mm	approx. 2.5mm
length:	*acc. table 1*	*acc. table 1*

*) heating band ends are thicker because of insulation

Temperature range -40° C ... +180°C

Glass silk tube electively **with*)** or **without**
*) For VPI process it must be used a version with glass silk tube (mGS)

Operating voltage 115V │ 230V │ 254V (other voltages on request)

Power *acc. tab. 1* (other power on request)

Dielectric strength 2kV / AC 50Hz / 20sec.

Bending radius ≥10mm

Supply line

Design	single litz wire, Teflon insulated
Colour code	*acc.tab.1*
Cross section	AWG 20/7 Cu. verz.
Length (standard)	500mm
Tensile strength	≥ 25N (litz wire/heating band)

Online inquiry *www.ephy-mess.de/englisch/forms/ssh.htm*

1.2 Table of deliverable standard versions type EM-Heat xx zGS

Voltage [V]	Power [W]	Length of heating band [m] ±5%	Color code of the supply line
230	12	0.26	grey/green
230	13	0.25	grey/orange
230	20	0.68	brown/brown
230	25	0.3	blue/green
230	25	0.43	blue/black
230	25	0.5	blue/brown
230	26	0.79	green/yellow
230	27	0.29	blue/white
230	40	0.68	blue/purple
230	40	1.01	blue/yellow
230	42	1.01	white/yellow
230	50	1.06	red/brown
230	65	1.47	green/white
230	67	1.47	green/brown
230	75	1.7	yellow/brown
230	76	2.3	yellow/yellow
230	77	0.7	blue/blue
230	100	1.7	black/green
230	100	1.85	black/brown
230	100	2.0	black/black
230	100	2.05	black/yellow
115	12	0.25	purple/brown
115	12.5	0.37	purple/black
115	12.5	0.25	white/brown
115	24	0.3	purple/grey
115	25	0.43	purple/purple
115	25	0.5	purple/green
115	27	0.5	green/green
115	39	1.01	purple/red
115	42	1.01	red/grey
115	45	0.72	red/black
115	50	1.06	purple/white
115	100	2.0	orange/green
115	115	1.7	orange/white
254	13	0.3	Blue/orange
254	22	0.43	blue/red
254	50	1.05	red/yellow
254	50	1.3	red/red

Tab. 1: deliverable standard versions

2. Electric Band Heater for hazardous areas

2.1 Electric Band Heater with Ex e approval

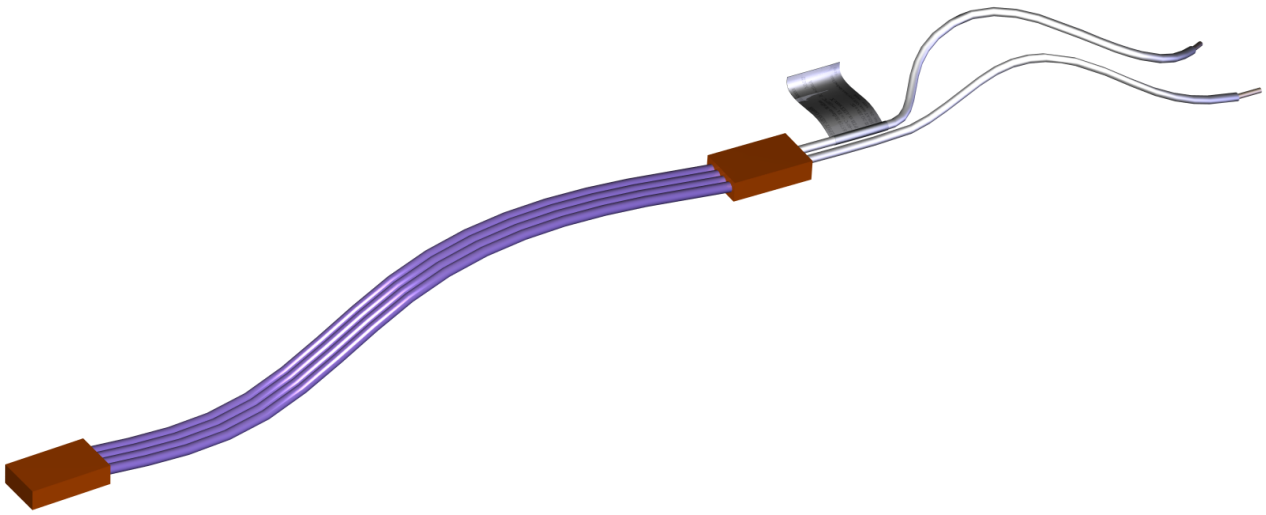


Fig. 2: EM-Heat 25 oGS – 230 -300 - 500 Ex

Specification Electric band heater EM-Heat xx zGS

Order code: *EM-HEAT xx zGS - U - HL - KL*

xx	=	power in [W]
z	=	m with
z	=	o without
GS	=	glass silk tube
U	=	operating voltage [V]
HL	=	length of the heating band [m]
KL	=	length of the supply line [mm]

Construction Resistance wire of CuNi or NiCr alloy looped on glass silk according to DIN 0254, with silicon insulated.
Electively with or without additional glass silk insulation
Fix connected supply line insulated with Teflon.

Type of protection (ATEX) II 2G Ex e II

Insulation heating wire Silicone

Dimension	mGS	oGS
width*)	approx. 11mm	approx. 9.5mm
height*)	approx. 3.5mm	approx. 2.5mm
length:	*acc. table 1*	*acc. table 1*

*) heating band ends are thicker because of insulation

Temperature range	-40°C ... +180°C
Glass silk tube	electively **with*)** or **without** *) For VPI process it must be used a version with glass silk tube (mGS)
Operating voltage	≤ 230V (other voltages on request)
Power	8W ...100W
Dielectric strength	2kV / AC 50Hz / 20 sec.
Bending radius	≥10mm

Supply line

Design	single litz wire, Teflon insulated
Colour code	WH/WH
Cross section	AWG 16/19 copper tinned.
Length (standard)	500mm
Tensile strength	≥ 25N (litz wire/heating band)

2.2 Self Limiting Band Heater with Ex e approval

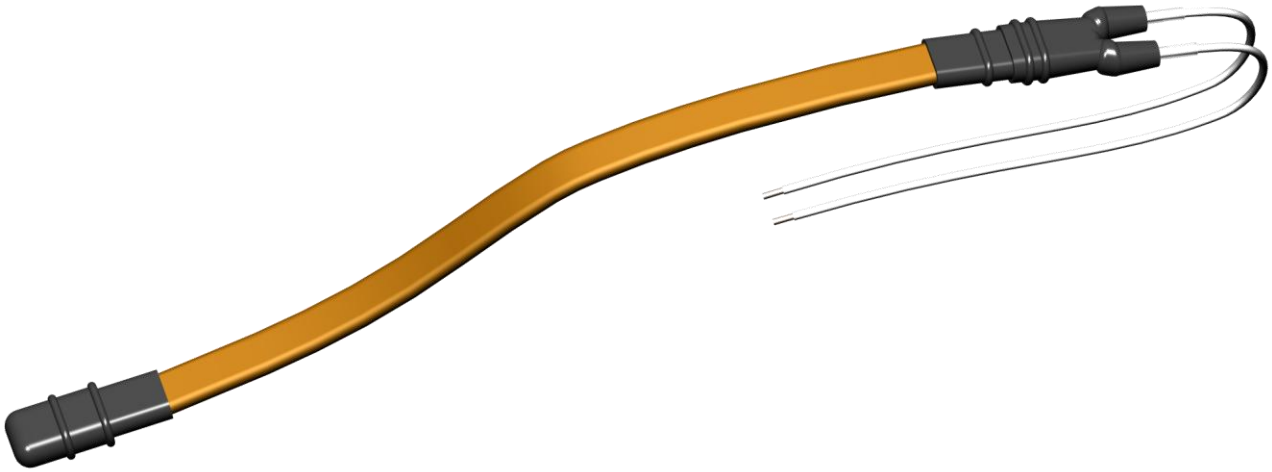
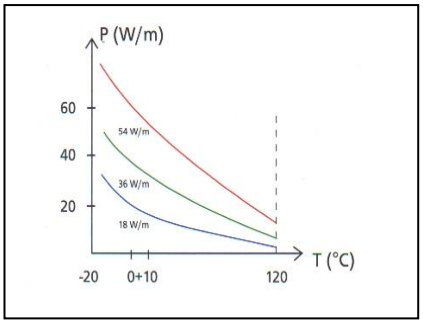


Fig. 3: Self Limiting Band Heater SBSSH

Specification	Self Limiting Band Heater SBSSH-xx Order code: SBSSH-*xx - zz - U - HL - KL* *xx* = power in [W] *zz* = heating power in W/m *U* = operating voltage [V] *HL* = length of the heating band [m] *KL* = length of the supply line [mm]
Design	Parallel supply line, heating element of intermetallic plastic compound, shielding harness of solder plated copper wires, outer cover made of FEP, fix connected supply line
Type of protection (ATEX)	II 2G Ex e II T3
Operating temperature	-40°C.... +160°C
Ambient temperature	up to 180°C
Operating voltage	230 V, 50-60 Hz
Dielectric strength	2kV / AC 50Hz / 20 sec.

Heating power

18 W/m	SBSSH-xx_18
36 W/m	SBSSH-xx_36
54 W/m	SBSSH-xx_54



Max. heating circuit length

18 W/m	100 m
36 W/m	53 m
54 W/m	32 m

Bending radius ≥ 20 mm (over the flat band side)

Supply line

Design	single litz wires or hose line
Color code	acc. customer request
Cross section	1 mm²
Length (standard)	500mm
Tensile strength	≥ 25N (supply line/heating band)