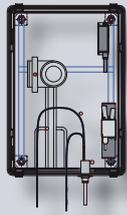


EX SSB

Protective cabinet system heating



Characteristics

- System cabinet for protective cabinet heating
- No internal Ex-viewing necessary anymore
- Flexible heating cable length adaption by means of variable voltage control
- One component less necessary than at comparable protective systems because of series connection

The heated protective cabinets of the type SSB70 and SSB150 Are used for the heating of installations and piping systems in zone 1 and higher. The protective cabinet heating system consists of a series connection of voltage controller with controllable of fix holding temperature (TRSB or TRSC) - radiator with controlling and limiting function (HKA.../100 AT) and a heat conductor loop, which is connected by use of a connection fitting of the type GH. The viewing of the heating conductor loop also includes its typical use outside the protective cabinet. It is also led outside the protective cabinet and runs in the outside area under a 40 mm thick mineral insulation. The heating cable runs parallel to lines made of rust resistant steel or other metals. The system includes different lengths of the heating conductor loop as well as different sizes of the protective cabinet. The protective cabinet itself serves as thermal separation of ambient temperature and objects to be heated. Likewise it has the purpose to protect the installation from atmospheric influences. The protective cabinet determined due to its requirements, such as thermal and electrostatic conductivity, ambient temperature range und dimensions. The manufacturer of the protective cabinet is selectable. Please take further specifications from the technical data.

TYPE CODE/ ORDERING / NECESSARY COMPONENTS

Ex SSB

-	-	-	-
1	2	3	4

1	TRS (see type code TRS)
2	HKA (see type code HKA)
3	GH (see type code GH)
4	Heating cable (MI-protection cable)

Please order the individual components analogue to the desired installation and indicate the purpose of the component.

SYSTEM COMPONENTS

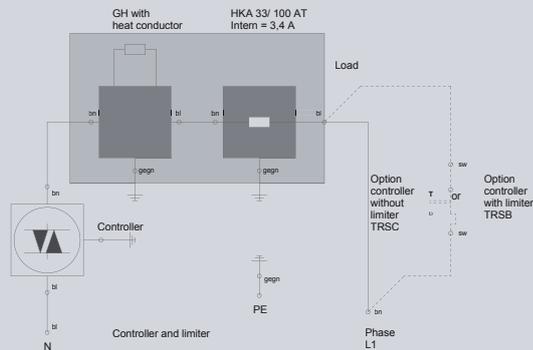
1.	Protective cabinet Intertec Multibox 150 arctic or antistatic
2.	Intertec Multibox 70 arctic antistatic
3.	Electrical resistance heating cable (1600 Ω/km or 1000 Ω/km)
4.	Connection fitting type GH
5.	Radiator HKA 33/100 AT or HKA 20/100 AT
6.	Voltage adjuster with controller (TRSC) and limiter (TRSB)
7.	Mineral insulation 40 mm
8.	Supply lines rust resistant steel diameter ≥ 10 mm.

TECHNICAL DATA EX SSB

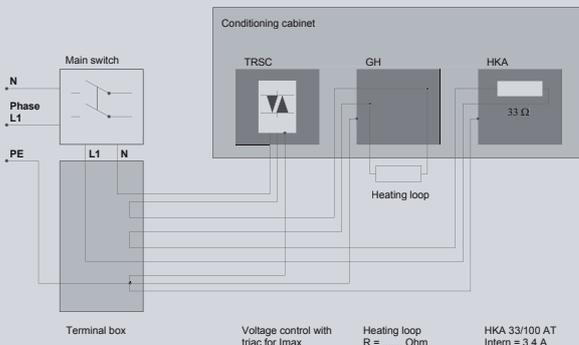
Combinations	HKA33/100AT + 1600 Ω/km MI heating cable	
	HKA20/100AT + 1000 Ω/km MI heating cable	
Temperatures	Ambient temperature range:	-20 °C to +40 °C
	Media temperature	+40 °C maximum
Electrical data	Capacity HKA.../100 AT:	370 W
	Series current:	3,34 A (HKA33), 4,30 A (HKA22)
	Capacity heating cable:	17,85 W/m at 1600 Ω/km
	Capacity heating cable:	18,50 W/m at 1000 Ω/km
	Series fuse:	7 A
Technical data	Length heating cable:	56 m real external, 0,6 m internal
	Type of heating cable	Mineral insulated coaxial transmission cable
	Control cable diameter	Approx. 10 mm
	Control cable wall thickness	Approx 1,2 mm
	Insulation strength	40 mm
	Thermal conductivity insulation	0,04 W/mK
Temperature class	T3	
Gas group	IIC	

OPERATING PRINCIPLE

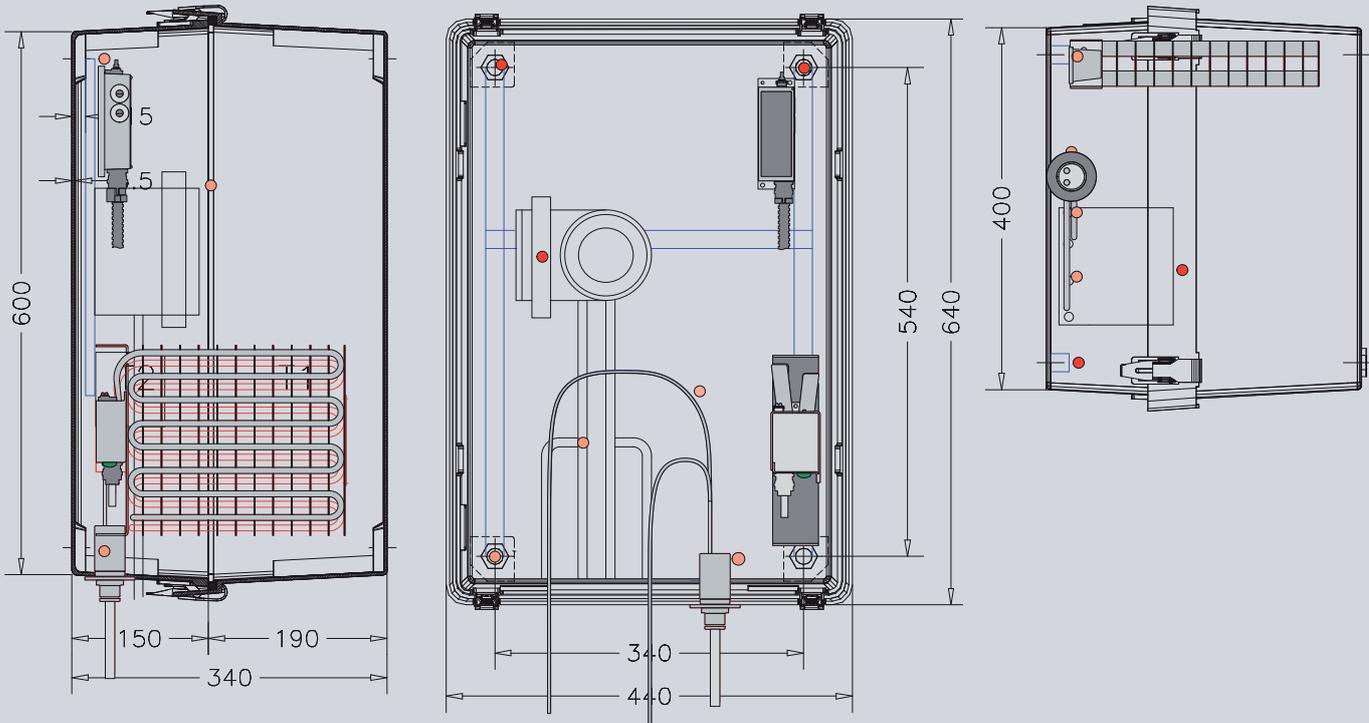
The protective cabinet heating of the type Ex SSB70/150 consists of a series connection of TRSB(C), HKA../100AT and the connection fitting GH, which is operated with a mineral insulated heating conductor loop. The connection is made exemplary according to the following diagram. For the connection of the respective connection cable in the potentially explosive atmosphere an accordingly suitable (if necessary certified) terminal box including cable gland must be used.



POSSIBLE WIRING DIAGRAM



MOUNTING POSSIBILITY STANDARD



INSTALLATION INSTRUCTIONS

The installation instructions of the individual components must be observed. You will find these in the respective manual. To fulfil the manifestations and technical data in the individual operating manual, attention must be paid to the following notes:

The mounting of the radiator and the further installation must be carried out according to the diagrams (see operating manual for specifications).
Install GH always below the radiator, see diagram.
Limit the maximum heating conductor length in the cabinet to a total of 0,6.
Preferably install the radiator horizontally and install element with maximum heat requirement in the upward flow of the radiator.
Do not lay the heat conductor loops horizontally in loops, as then the thermal heats cumulate.
Do not lay the heating cables on top of each other but always separately.
Lay heating cables in the protective cabinet without insulation.
The indications on the max. insulation strength and temperature of the medium in the pipelines to be heated must be complied with.
The GH must be self-assembled according to the enclosed operating manual of the GH.
The TRSB must be installed above the lower edge of the HKA.
The circuit may be secured with max. 7 A.
The set temperature at the TRSB may not exceed +70°C.
The series current must be adjusted to
o max. 3,35 A (HKA33/100AT), or rather
o 4,30 A (HKA20/100AT).
o For this purpose the TRSC(B) must be set on approx. 100 V before putting into operation. The minimum value of 70 V should be used only cautiously, as the used potentiometer does not tolerate higher controlling torques (max. 0,5 Ncm). Rev up the voltage at the TRSB so far until the max. permissible current is reached.
The connection of the free conductor ends must be carried out in a suitable, if necessary also certified terminal box.

Please take the technical data of the individual modules from the respective operating manual. Download on www.erich-ott.de