Modular master controller system TBC 01

GESSMANN Industrial Controllers

Gessmann's master controller system TBC 01 is specially designed for usage in railway applications. Their robust design which is based on the relevant standards EN-60077, UIC 612 and EN-50155 guarantees low life cycle costs and a maintainability over a period of 35 years.

Technical data

Ambient temperature outside vehicle	-40°C to +50°C->EN 50155 Class T1, T2, T3, TX
Nominal supply voltage	24/ 72/ 110VDC with variations according to EN 50155
Shock and vibration	According to EN 61373
Electromagnetic compatibility (EMC)	According to EN 50121-3-2
Isolation and high voltage test	According to EN 50155
Pollution degree	PD 3 according to EN 60077-1 (others on demand)
Fire and smoke	Compliant to EN 45545, (HL3) (others on demand)
Mechanical endurance	10 million operating cycles
Electrical endurance	Minimum operating cycle class C3/A3 according to EN 60077-2

Example

RC01	72VDC	C2	S1	D2	RSH-02	A2	I	F1

Basic Unit

TBC 01

Power supply

V1	24VDC
V2	72VDC
V3	110VDC

Output signal analog

C1	1x current output 4-20mA *page 26*
C2	2x current outputs 4-20mA (redundant) *page 26*

Output signal digital

S1	1 contact SAS-02 (snap action switch)
S2	2 contacts SAS-02 (snap action switch)
S3	3 contacts SAS-02 (snap action switch)

Deadman

D1	Push down 1 contact SAS-01 (snap action switch)
D2	Push down 2 contacts SAS-01 (snap action switch)

Handle

RSH-01	Ball handle *page 25*
RSH-02	Conical handle *page 25*
RSH-03	Conical handle *page 25*
RSH-04	Conical handle *page 25*

Actration

A1	Time dependent *page 3*
A2	Position dependent *page 3*

Interface

I1	Mating connector *page 2*
I2	Cable outlet with customer specific length *page 2*

Frame

F1	Frame with engraving *page 2*

**special / customer specific*

Technical details may vary based on configuration or application! Technical data subject to change without notice!

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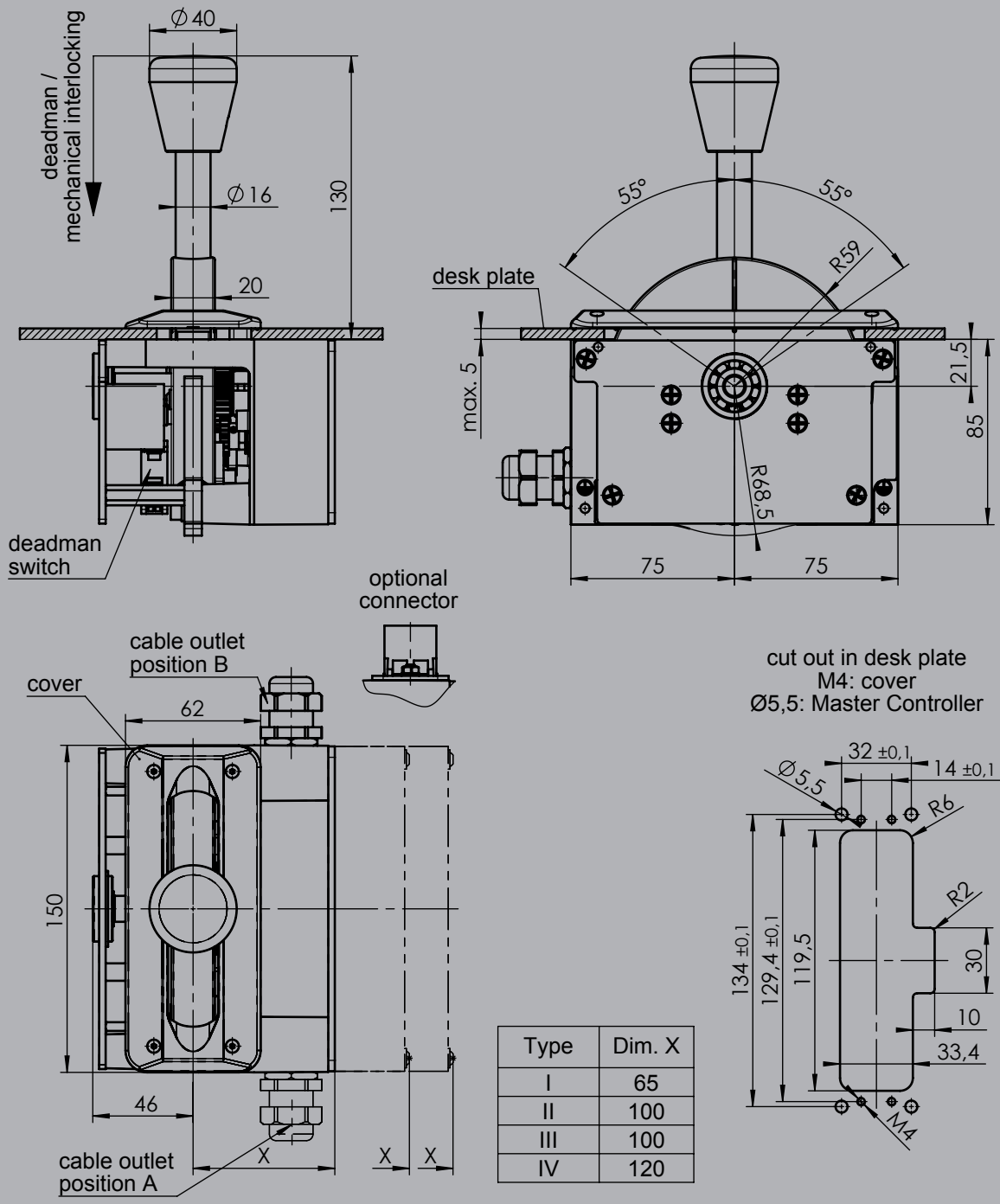
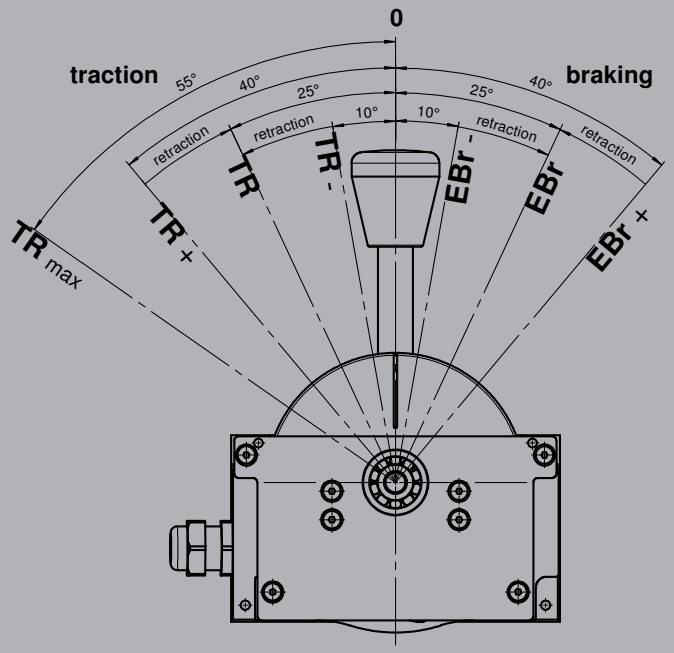


Type	Dim. X
I	65
II	100
III	100
IV	120

1

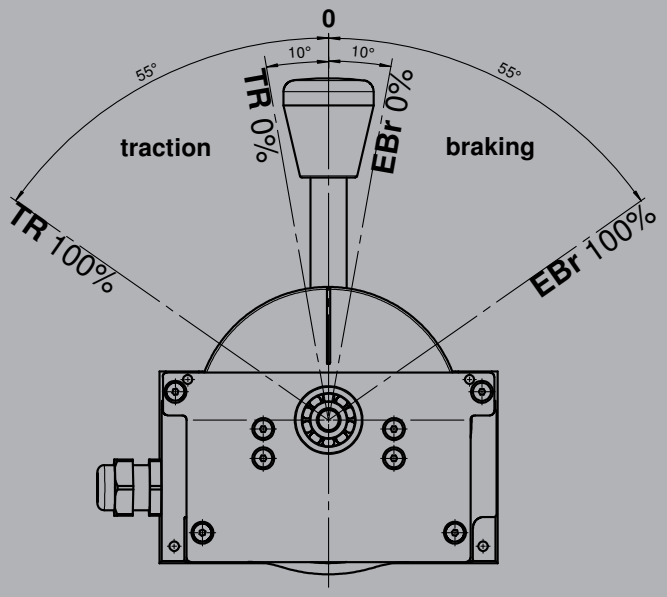
Time dependent

In this version the increase as well as the decrease of traction or braking effort only depends on the time the handle is deflected accordingly.
For example this means the traction effort will increase step by step as long as the handle is located in TR+ position.
The handle will move back to its starting position when it is released. The different minimum and maximum angles, functions and associated positions are mandatory and may not be modified.
However the other parameters may be adapted to the customer`s demand.



Position dependent

In this version the traction or braking effort only depends on the position of the handle.
For example this means the traction effort will be 50% when the handle is moved to the middle of the traction area and it may not change no matter how long the handle is situated there. The different minimum and maximum angles, functions and associated positions are mandatory and may not be modified.
However the other parameters may be adapted to the customer`s demand.



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