

Service case with test unit for proportional valves and their control electronics

RE 29687/06.05
Replaces: 01.03

1/8

Type VT-PPV-1

Series 1X



H/A/D 6732/00

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Further information:

- For a product description and operating instructions for VT-PPV-1, see RE 29687-B

Features

Page	
1	– The service case comes with an integrated test unit, various cable sets and accessories
2	– Test unit for commissioning and servicing proportional valves and their analogue and digital control electronics
2	– Manual preselection and adjustment of command values
3	– Checking call-up functions
4	– Measurement and adjustment of ramp times
5	– Checking of command value and actual value voltages
6	– Checking of solenoid currents
7	– Measurement of external DC voltages up to 100 V
8	– Switching and testing of relays and analogue switches on electronic cards
	– LED indicator lamps for 24 V outputs
	– Functional testing of amplifiers of modular design
	– Functional testing of valves with integral electronics possible by means of a separate cable (not included in the scope of supply). This test case can also be used to subject valves of competitors to functional tests.
	A connecting cable with open ends is included.
	– Service case:
	• Dimensions (W x H x D) 530 x 390 x 210 mm
	• Weight (complete) ca. 10 kg

Ordering code

VT-PPV-1 -1X/ V0/ 0 / *

Service case with integrated test unit for proportional valves and their control electronics

Further details in clear text

Series 10 to 19
(10 to 19: Unchanged technical data and pin assignment) = 1X

0 = Basic version

V0 = Basic version

The scope of supply comprises:

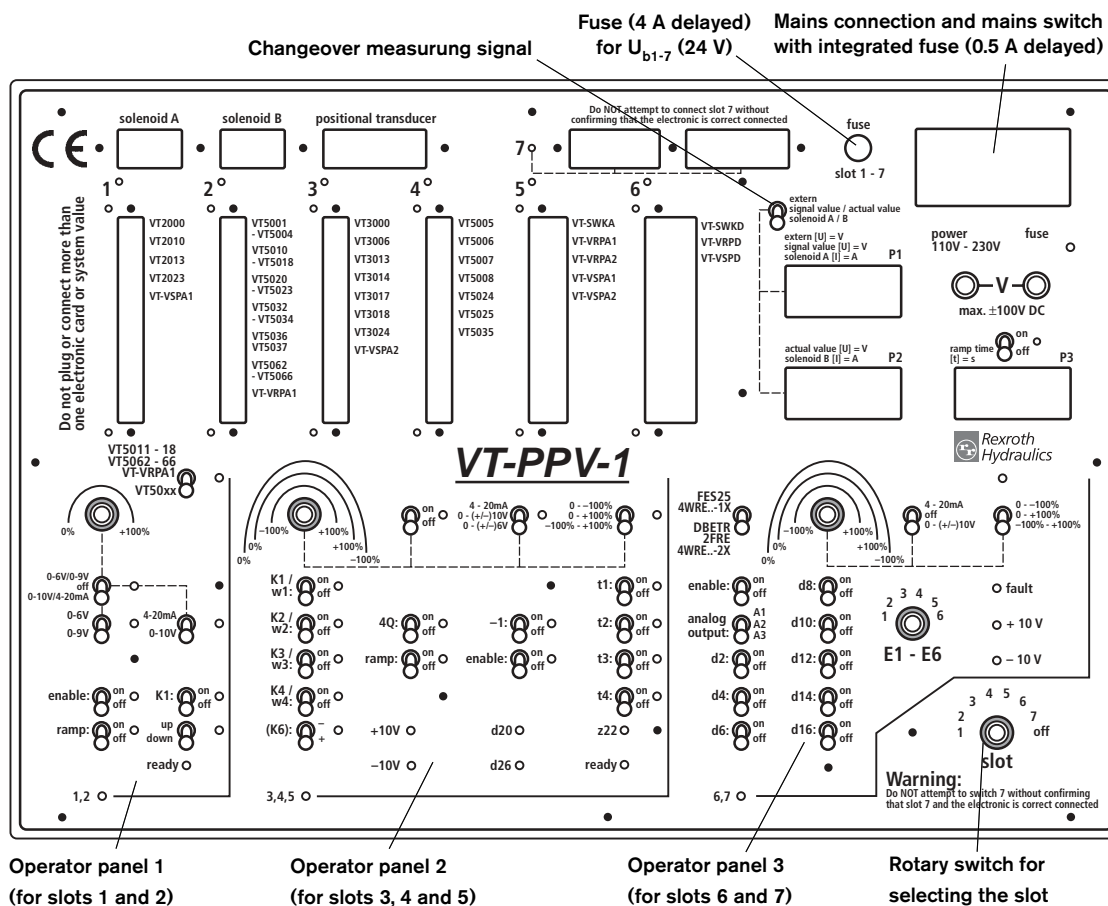
Designation	Material-Number:	General accessories included in the scope of supply
Test unit VT-PPV (in the service case)		Measuring cables (red and black) with laboratory plugs (Ø4 mm to Ø2 mm)
Cable set for solenoid; 2-pin (2x)	R900899764	Mains cable
Cable set for displacement transducer; 3-pin	R900899765	Spare fuses
Cable set for displacement transducer; 4-pin	R900899766	Screw driver (blade with 2.5 mm)
Cable set for slot 7; 4-pin	R900899767	
Cable set for slot 7; 5-pin	R900899768	

Not included in the scope of supply:

Cable set VT-PPV Slot 7, ±10 mA Adapter Material-No. **R900733785**

Further cable sets for testing valves with integral electronics on enquiry.

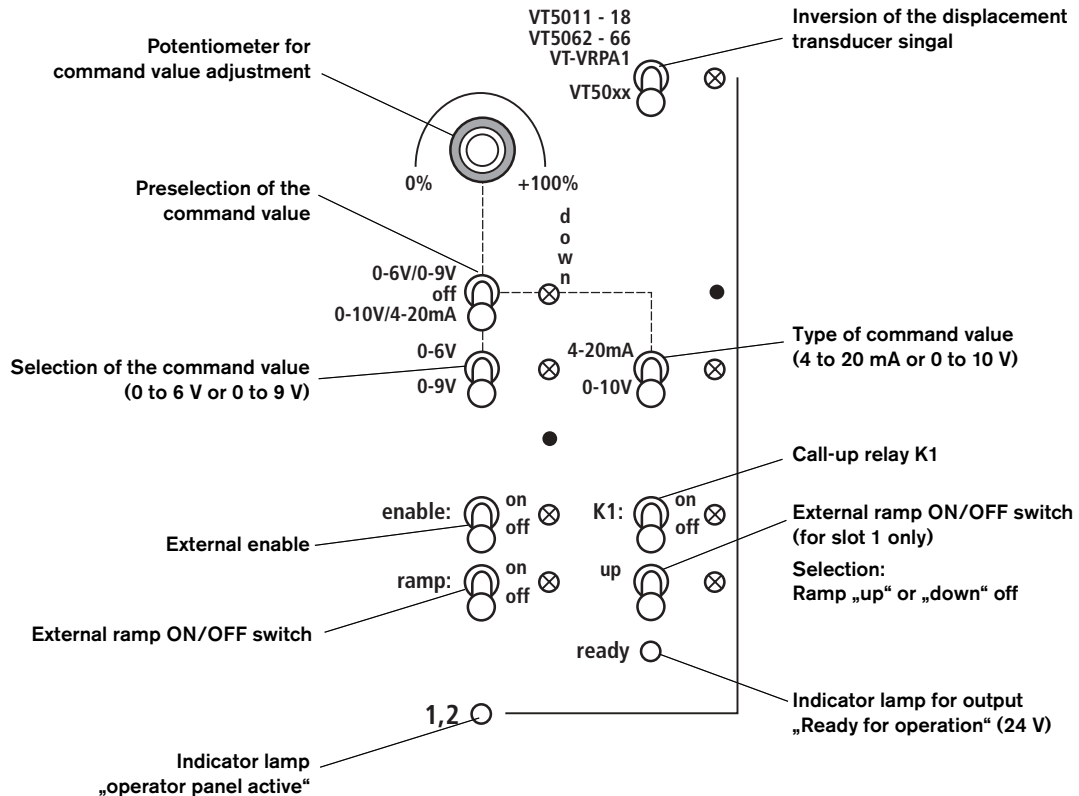
Unit drawing



Description of operator's panel

Operator panel 1:

Slots 1 and 2 are assigned to this operator panel.

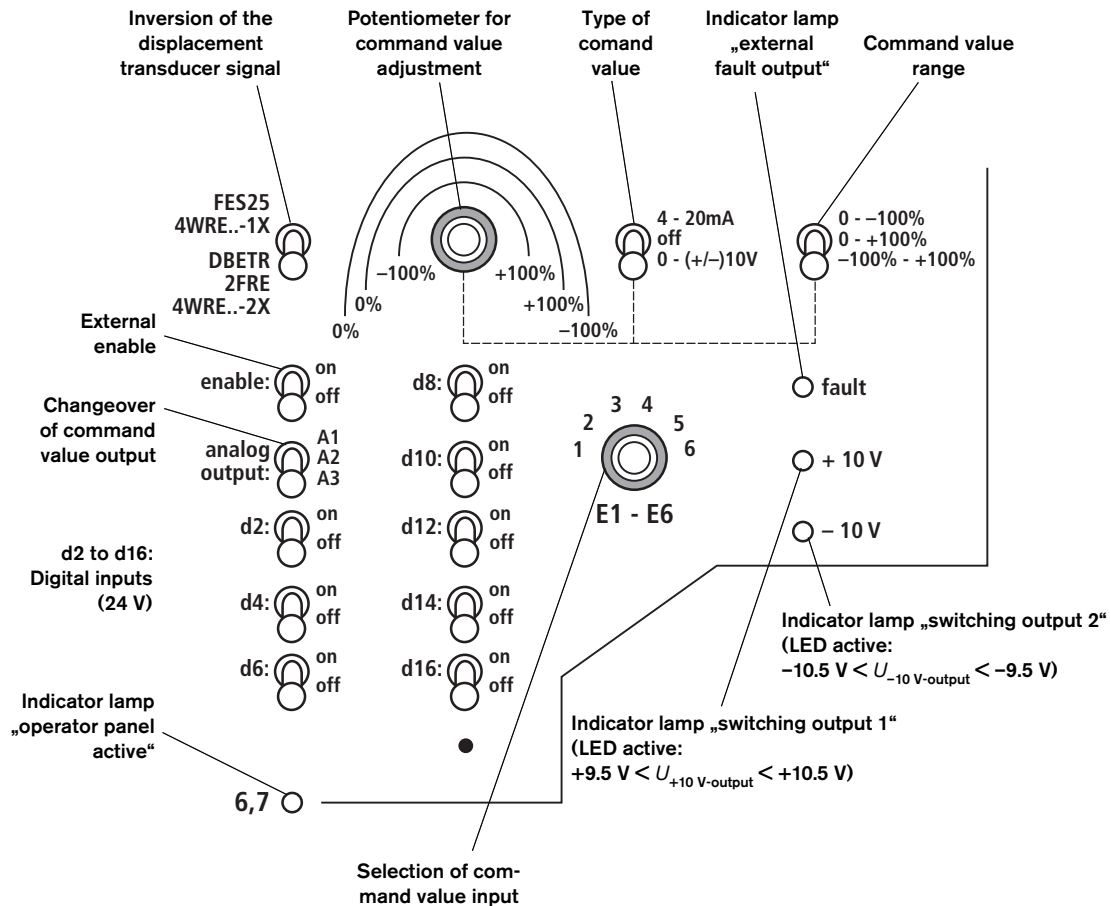


⊗ LED function indicator lamp (signals, whether the switch for the selected slot is active)

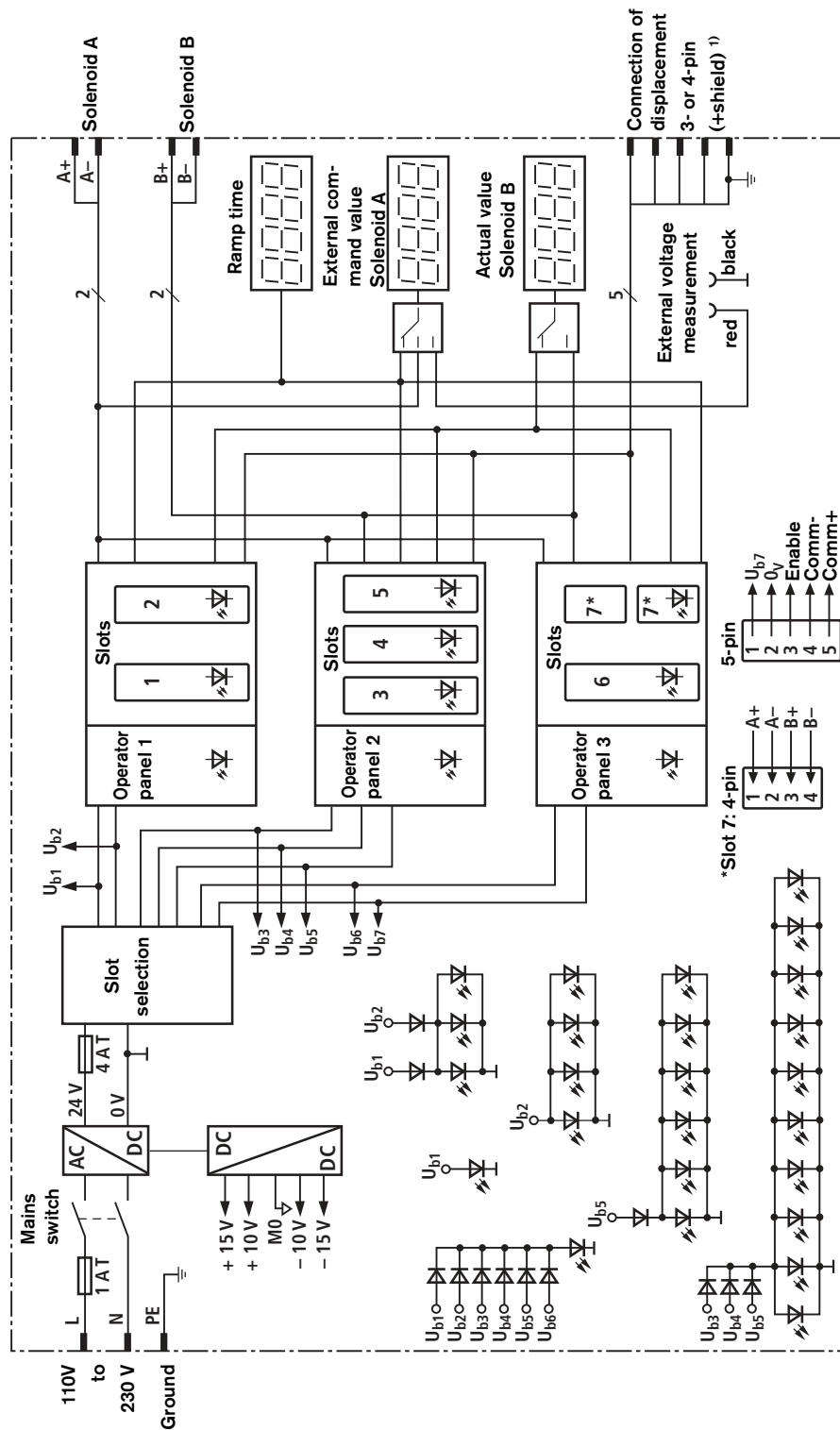
Description of operator's panel (continued)

Operator panel 3:

Slots 6 and 7 are assigned to this operator panel.



Block circuit diagram



1) ... depending on the selected cable set

- | | | |
|---------|-----|---------------------------------|
| Slot: 1 | ... | 32-pin socket connector |
| 2 | ... | 32-pin socket connector |
| 3 | ... | 32-pin socket connector |
| 4 | ... | 32-pin socket connector |
| 5 | ... | 48-pin socket connector |
| 6 | ... | 64-pin socket connector |
| 7 | ... | 4- and 5-pin plug-in connectors |



Technical Data (for applications outside these parameters, please consult us!)

General		
Operating voltage	U_B	110 VAC to 230 VAC; -15 % + 10 %; 47 Hz to 63 Hz
Power consumption	$P_{S \max}$	approx. 55 VA
Current consumption	I_{\max}	approx. 0.5 A
Fuses:		
– Primary side (110 to 230 V)	I_S	1 A delayed
– Secondary side (24 V)	I_S	4.0 A delayed
Measuring ranges:		
– External voltage measurement	U	0 to ± 100 VDC
– Ramp time measurement	t	10 ms to 99.99 s
Dimensions (W x H x D)		530 x 390 x 210 mm
Permissible operating temperature range	ϑ	0 to 50 °C
Storage temperature range	ϑ	-25 °C to +85 °C
Weight	m	approx. 10 kg
Slots 1 to 7		
Supply voltage	U_{b1} to U_{b7}	24 V
Command value preselection	U	0 to +10 V or -10 to +10 V
	U	0 to +9 V
	U	0 to +6 V or -6 V to +6 V
	I	4 to 20 mA
Call-ups	U	24 V

Connections

Mains voltage	Connector plug for non-heating apparatus
Solenoid A:	2-pin plug-in connector (connecting cable included in the scope of supply)
Solenoid B:	2-pin plug-in connector (connecting cable included in the scope of supply)
Displacement transducer:	5-pin plug-in connector (depending on the selection of the cable set for 4-pin or 3-pin connection of the displacement transducer)
Slots 1 to 4:	32-pin socket connector (form D)
Slot 5:	48-pin socket connector (form F)
Slot 6:	64-pin socket connector (form G with "Millerspalte")
Slot 7:	5-pin plug-in connector and 4-pin plug-in connector for measuring solenoid currents
External voltage measurement:	4 mm socket

Overview of control electronics that can be tested

At the time when this data sheet was published, the test unit VT-PPV-1 could be used to carry out functional tests on the following control electronics:

Slot on the test unit						
1	2	3	4	5	6	7
(32-pin socket connector)	(32-pin socket connector)	(32-pin socket connector)	(32-pin socket connector)	(48-pin socket connector)	(64-pin socket conn. with „Millerspalte“)	(4- and 5-pin plug-in connectors)
VT 2000	VT 5001	VT 3000	VT 5005	VT-SWKA-1	VT-SWKD	Amplifiers of modular design
VT 2010	VT 5002	VT 3006	VT 5006	VT-VRPA1	VT-VRPD	
VT 2013	VT 5003	VT 3013	VT 5007	VT-VRPA2	VT-VSPD	Controlling of valves with integral electronics possible by means of separate
VT 2023	VT 5004	VT 3014	VT 5008	VT-VSPA1		
VT-VSPA1	VT 5010	VT 3017	VT 5024	VT-VSPA2		(cable not included in the scope of supply).
	VT 5011	VT 3018	VT 5025			
	VT 5012	VT 3024	VT 5035			Connecting cable with open ends included.
	VT 5013	VT-VSPA2				
	VT 5014					
	VT 5015					
	VT 5016					
	VT 5017					
	VT 5018					
	VT 5020					
	VT 5021					
	VT 5022					
	VT 5023					
	VT 5032					
	VT 5033					
	VT 5034					
	VT 5036					
	VT 5037					
	VT 5062					
	VT 5063					
	VT 5064					
	VT 5065					
	VT 5066					
	VT-VRPA1					

⚠ Caution!

No more than one electronic component may be plugged or connected at a time. Several electronic components connected or plugged at a time can destroy each other!

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