

Replacement instructions

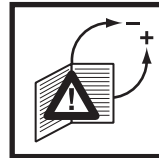
DSLC px Vx 24 VDC
by
VPM-VC 24 VDC

The replacement of the DSLC px Vx by a VPM-VC must be carried out by a qualified personnel only. The function of the VPM-VC corresponds largely to the control devices DSLC px Vx. After the replacement, a function check must be carried out by a qualified and skilled person.

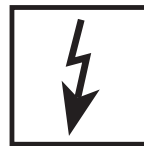
The conversion instruction does not replace the operating and mounting instructions of the VPM-VC and the DSLC px Vx. These instructions are absolutely necessary for the conversion and the further safe operation.



Work on the VPM may only be performed by specialist staff.



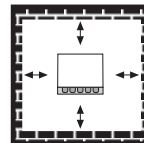
Any adjustment and application-specific adjustment values must be made in accordance with the appliance/boiler manufacturers instructions.



Never perform any work on the device when it is under voltage. Observe public regulations.



On completion of work on the VPM, perform a leakage and function test.



Do not allow any direct contact between the VPM and hardened masonry, concrete walls or floors.



If these instructions are not heeded, the result may be personal injury or damage to property.



The warranty for the device is void if the electrotechnical components are tampered with, i.e. automatically when the lead seal is damaged.

We reserve the right to make modifications in the course of technical development.

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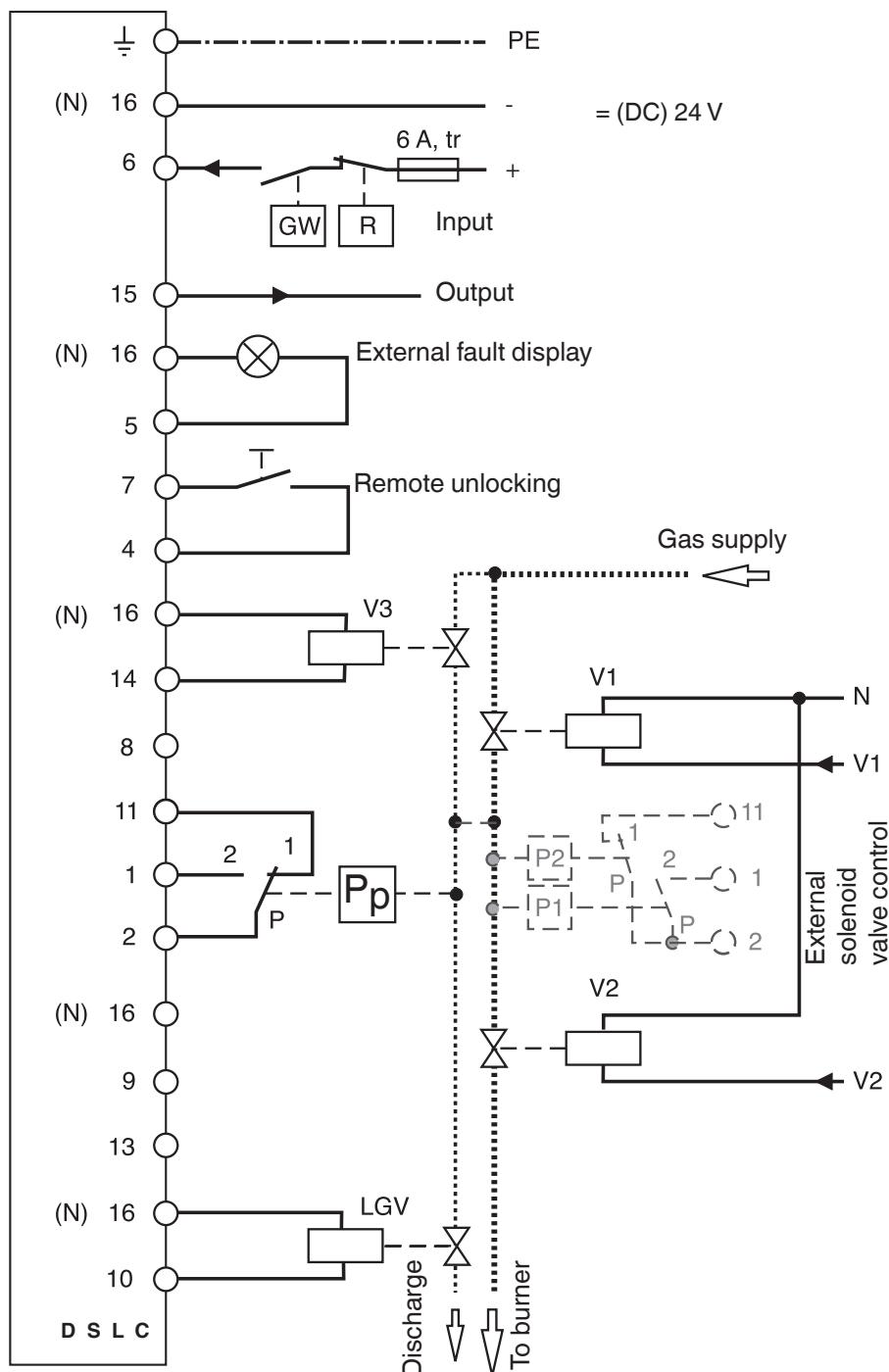
The Pressure Equipment Directive (PED) and the Energy Performance of Buildings Directive (EPBD) require a periodic inspection of **heating appliances** in order to ensure a high degree of efficiency over a long term and, consequently, the least environmental pollution. **It is necessary to replace safety-relevant components after they have reached the end of their useful life. This recommendation applies only to heating appliances and not to industrial heating processes. DUNGS recommends replacing such components according to the following table:**

Safety relevant component	DUNGS recommends replacement after:	Operating cycles
Valve proving systems	10 years	250.000
Pressure switch	10 years	N/A
Automatic burner control with flame safeguard	10 years	250.000
Flame detector (UV probes)	10.000 h Operating hours	
Gas pressure regulators	15 years	N/A
Gas valve with valve testing system	after error detection	
Gas valve without valve testing system*	10 years	250.000
Low gas pressure switch	10 years	N/A
Pressure relief valve	10 years	N/A
Gas-air ratio control system	10 years	N/A
* Gas families I, II, III		N/A not applicable

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Electrical connection DSLC



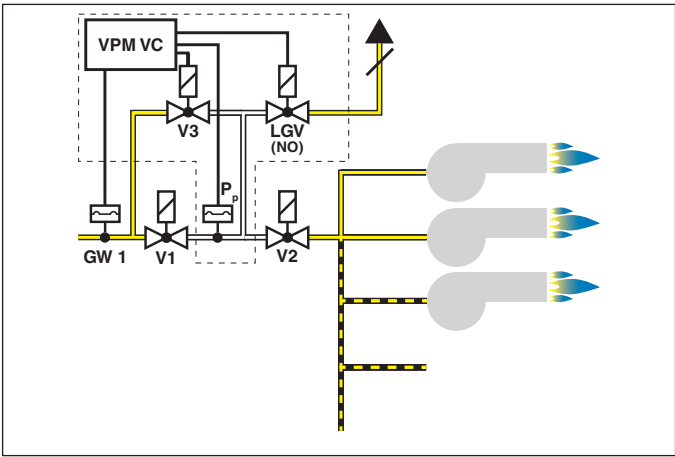
DSL Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN	4	
Fault display 24 VDC +	5	
Test request 24 VDC +	6	
Reset / OUT 24 VDC +	7	
free	8	
free	9	
LGV / 24 VDC +	10	
Pp / NC	11	
free	12	
free	13	
V3 / 24 VDC +	14	
Release / 24 VDC +	15	
24 VDC -	16	

New only VPM

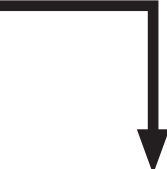
VPM (new)

VPM valve check with

- Pilot valves (V3/NC, LGV/NO)
- Venting through roof

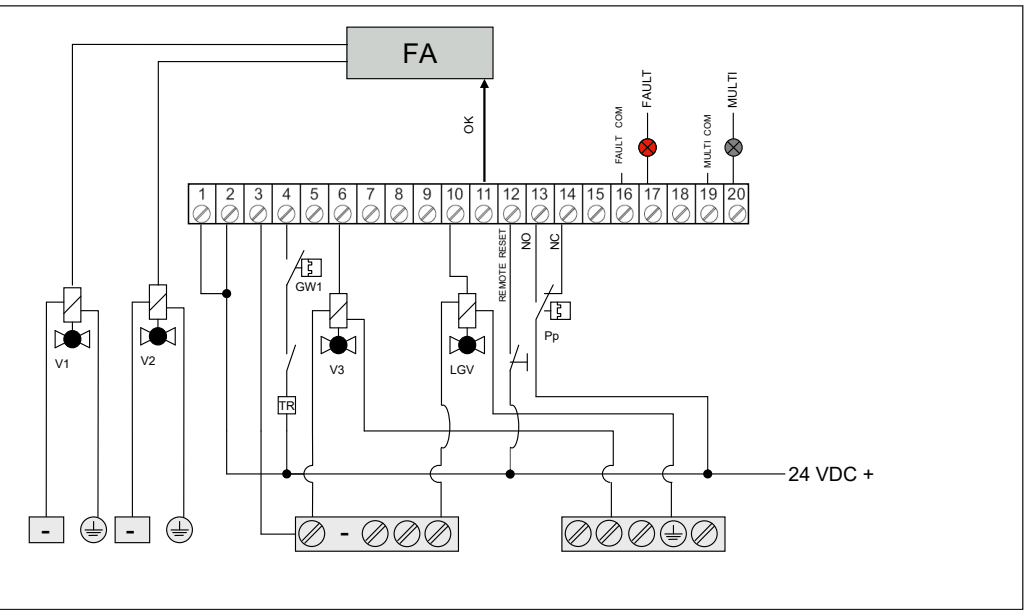


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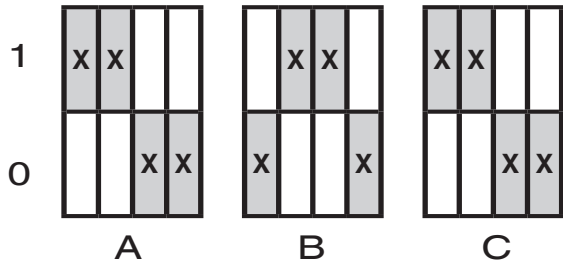


	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		24 VDC +
→	12	Reset / IN 24 VDC +
→	17	Fault OUT 24 VDC +
→	16	Fault IN 24 VDC +
→	4	Test request 24 VDC +
→		24 VDC +
→	10	LGV / 24 VDC +
→	14	Pp / NC
→	6	V3 / 24 VDC +
→	11	Release / 24 VDC +
→	3	24 VDC -
	20	Multifunction output OUT 24 VDC +
	19	Multifunction output IN 24 VDC +
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	24 VDC +
	1	24 VDC +

Electrical connection VPM-VC

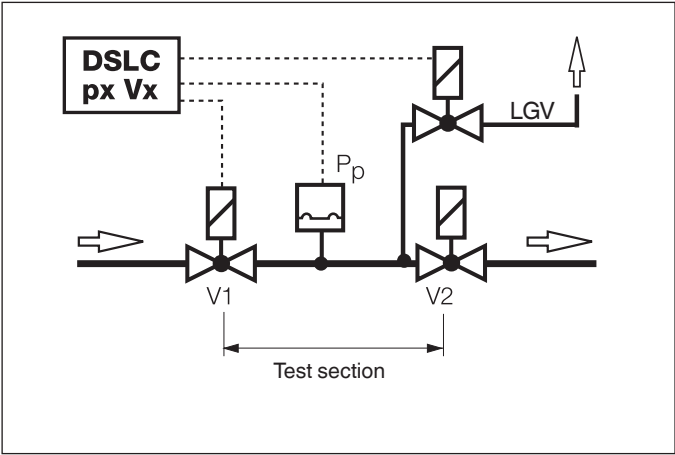


DIP switch assignment



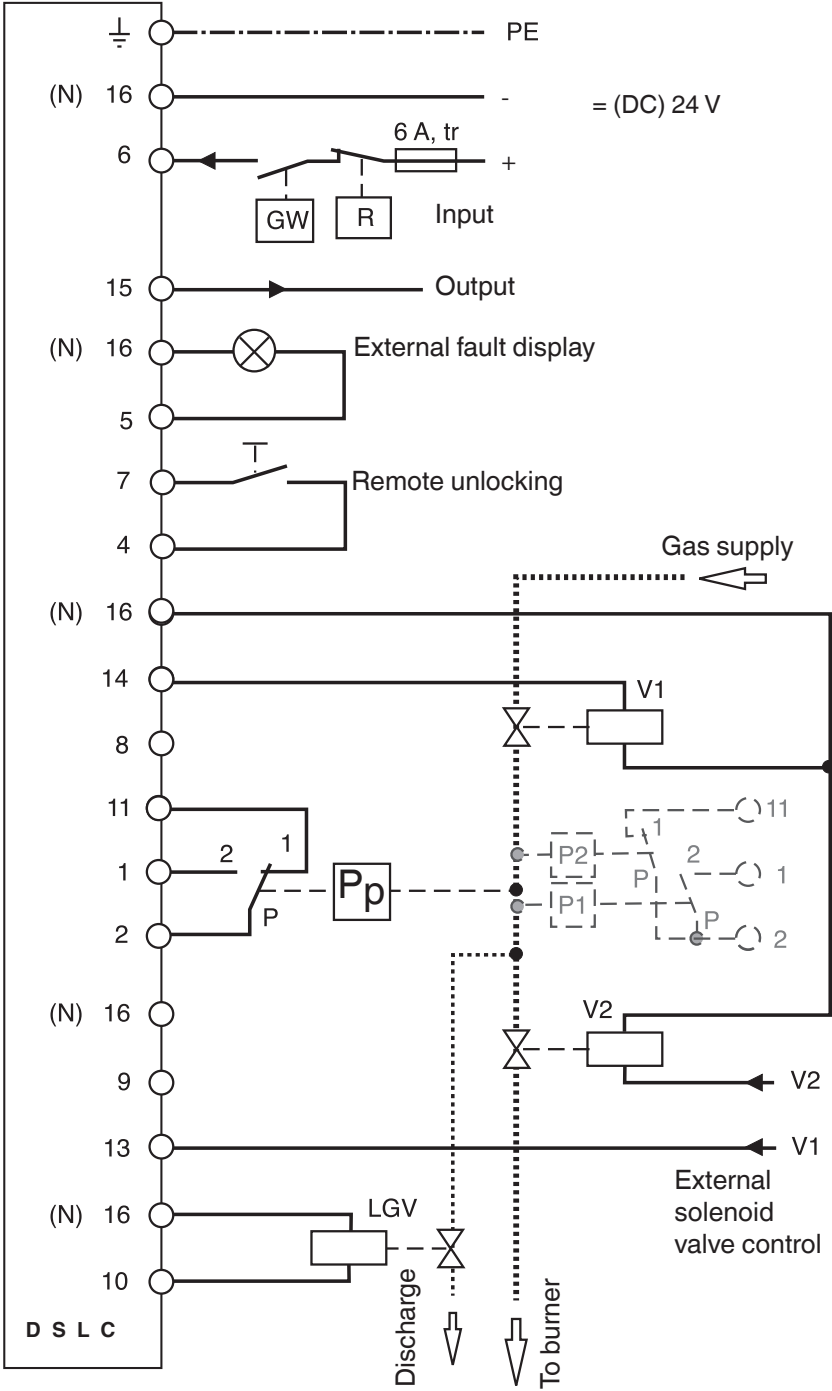
DSLCL (old)

- DSLCL valve check with
- Pilot valve (LGV/NO)
 - Venting through roof



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Electrical connection DSLC



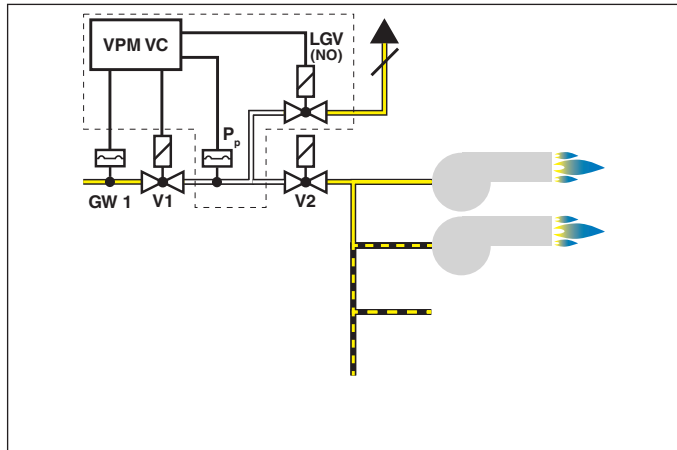
DSLCL Connection	of terminal	rewiring according to
PE	PE	→
Pp / NO	1	→
Pp / COM	2	→
free	3	
Reset / IN 24 VDC +	4	→
Fault display 24 VDC +	5	→
		→
Test request 24 VDC +	6	→
Reset / OUT 24 VDC +	7	→
free	8	
free	9	
LGV / 24 VDC +	10	→
Pp / NC	11	→
free	12	
Supply V1 / 24 VDC +	13	→
V1 / 24 VDC +	14	→
Release / 24 VDC +	15	→
24 VDC -	16	→

only VPM-VC

New only VPM

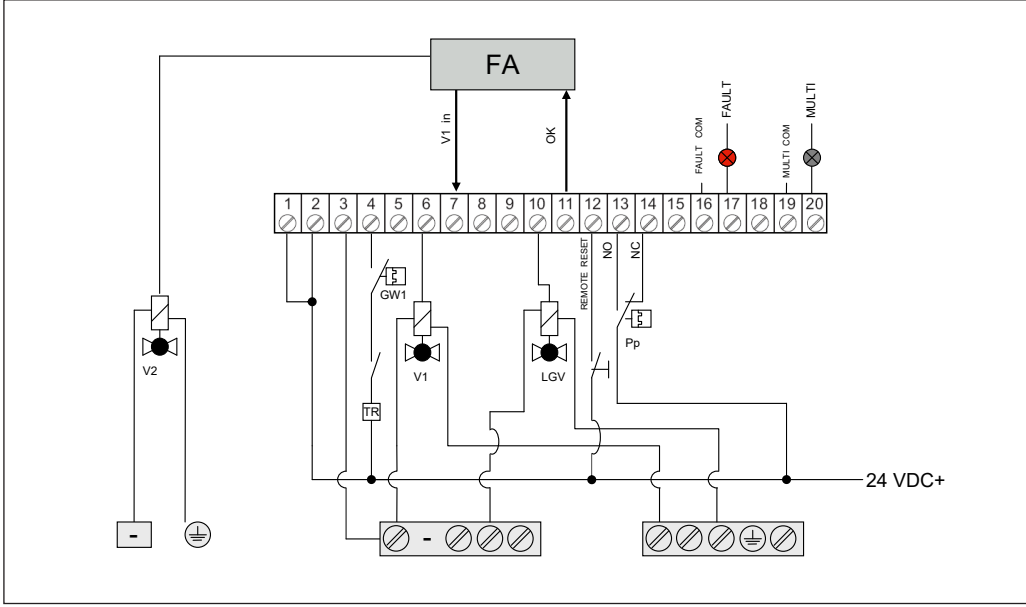
VPM (new)

- VPM valve check with
- Pilot valve (LGV/NO)
 - Venting through roof

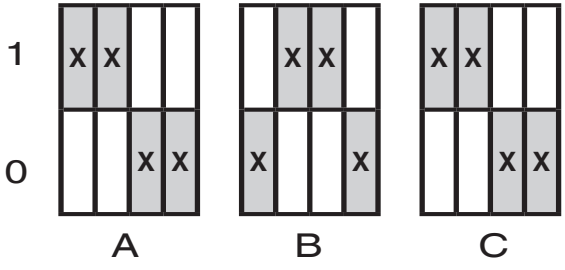


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Electrical connection VPM-VC



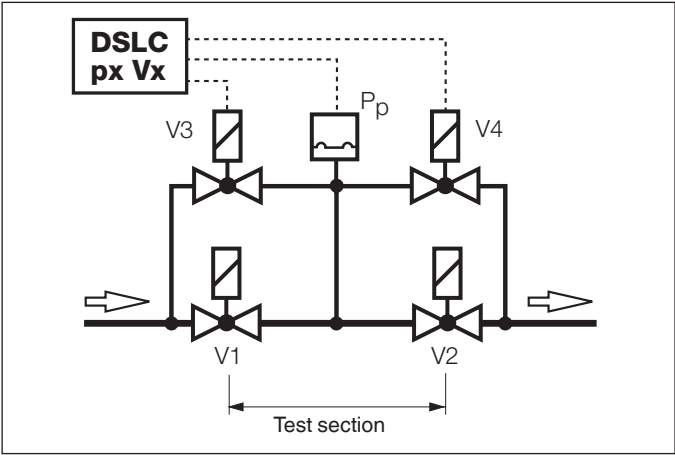
DIP switch assignment



on terminal		VPM Connection
PE	PE	
13	Pp / NO	24 VDC +
12	Reset / IN 24 VDC +	
17	Fault OUT 24 VDC +	
16	Fault IN 24 VDC +	
4	Test request 24 VDC +	24 VDC +
10	LGV / 24 VDC +	
14	Pp / NC	
7	Supply V1 24 VDC +	
6	V1 / 24 VDC +	
11	Release / 24 VDC +	
3	24 VDC -	
20	Multifunction output OUT 24 VDC +	
19	Multifunction output IN 24 VDC +	
18	free	
15	free	
9	free	
8	free	
7	free	
5	free	
2	24 VDC +	
1	24 VDC +	

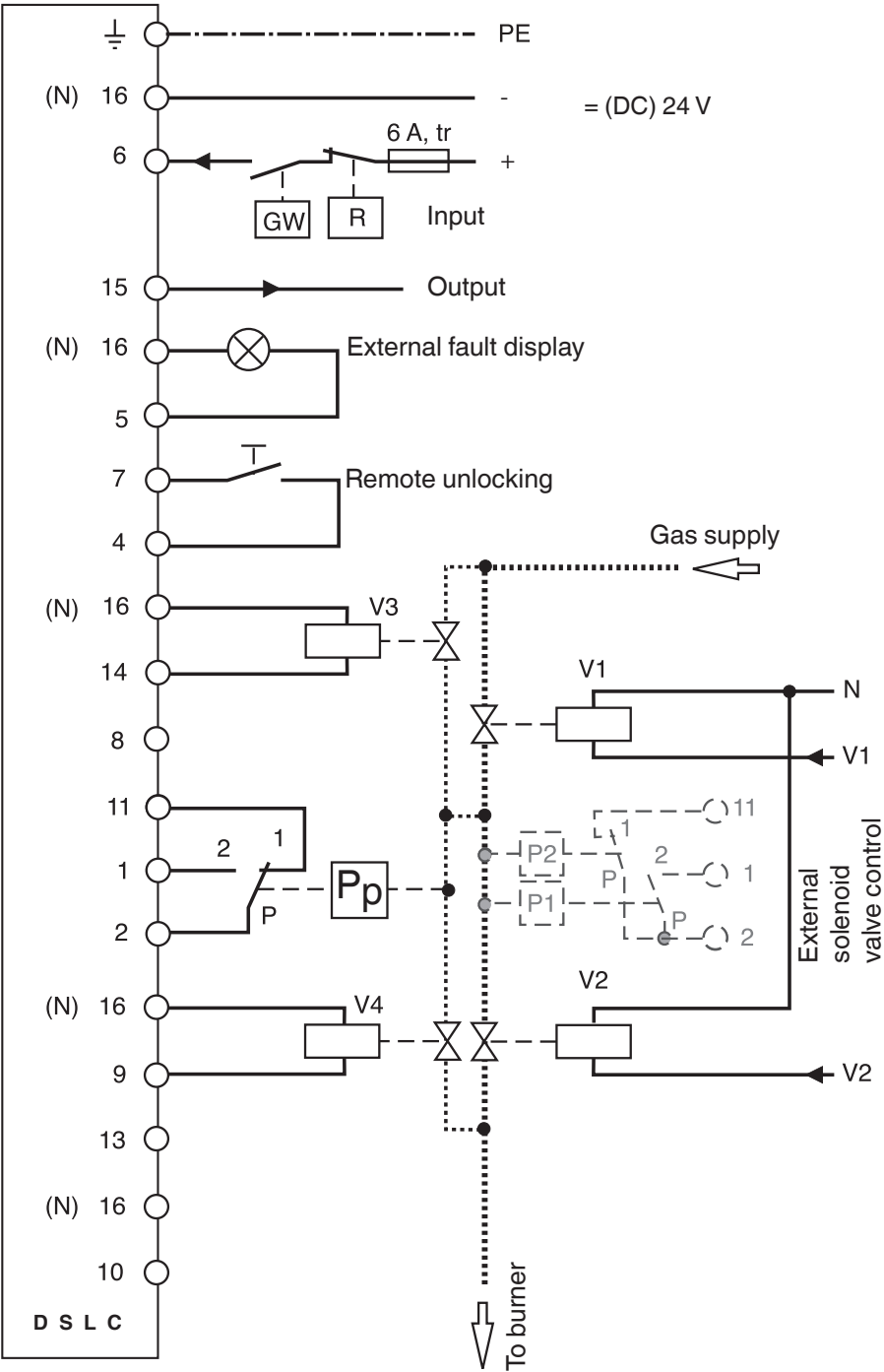
DSLCL (old)

- DSLCL valve check with
- Pilot valves (V3/NC, V4/NC)
 - Venting into the burner room



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Electrical connection DSLCL



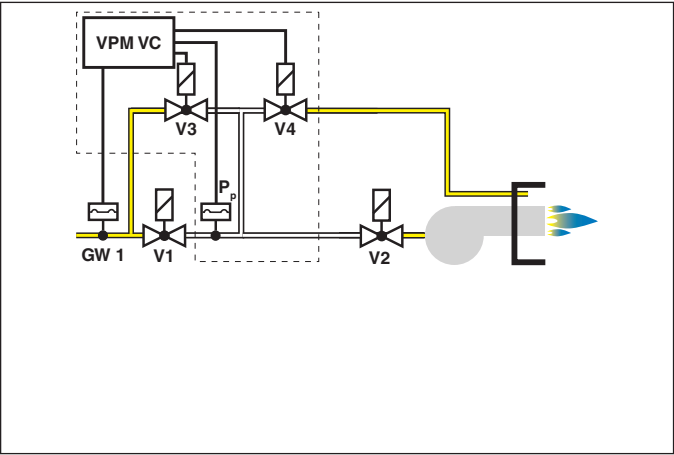
DSLCL Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN 24 VDC +	4	
Fault display 24 VDC +	5	
Test request 24 VDC +	6	
Reset / OUT 24 VDC +	7	
free	8	
V4 / 24 VDC +	9	
free	10	
Pp / NC	11	
free	12	
free	13	
V3 / 24 VDC +	14	
Release / 24 VDC +	15	
24 VDC -	16	
only VPM-VC		

New only VPM

VPM (new)

VPM valve check with

- Pilot valves (V3/NC, V4/NC)
- Venting into the burner room

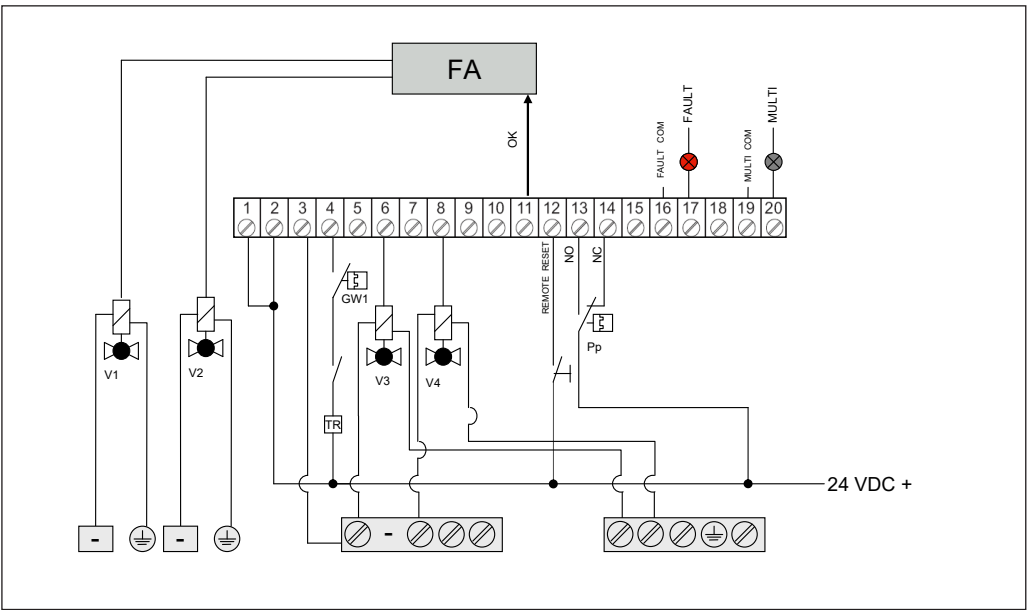


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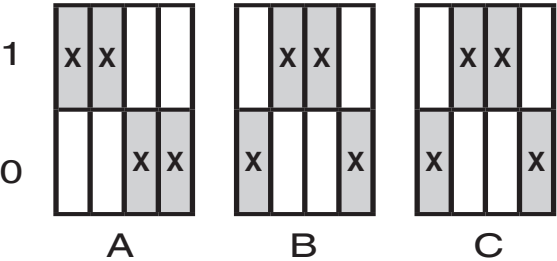


	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		24 VDC +
→	12	Reset / IN 24 VDC +
→	17	Fault OUT 24 VDC +
→	16	Fault IN 24 24 VDC +
→	4	Test request 24 VDC +
→		24 VDC +
→	8	V2 / 24 VDC +
→	14	Pp / NC
→	6	V3 / 24 VDC +
→	11	Release / 24 VDC +
→	3	24 VDC -
	20	Multifunction output OUT 24 VDC +
	19	Multifunction output IN 24 VDC +
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	24 VDC +
	1	24 VDC +

Electrical connection VPM-VC

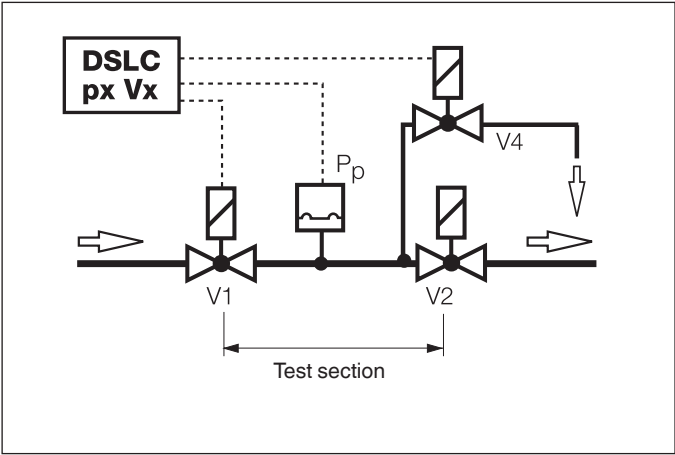


DIP switch assignment



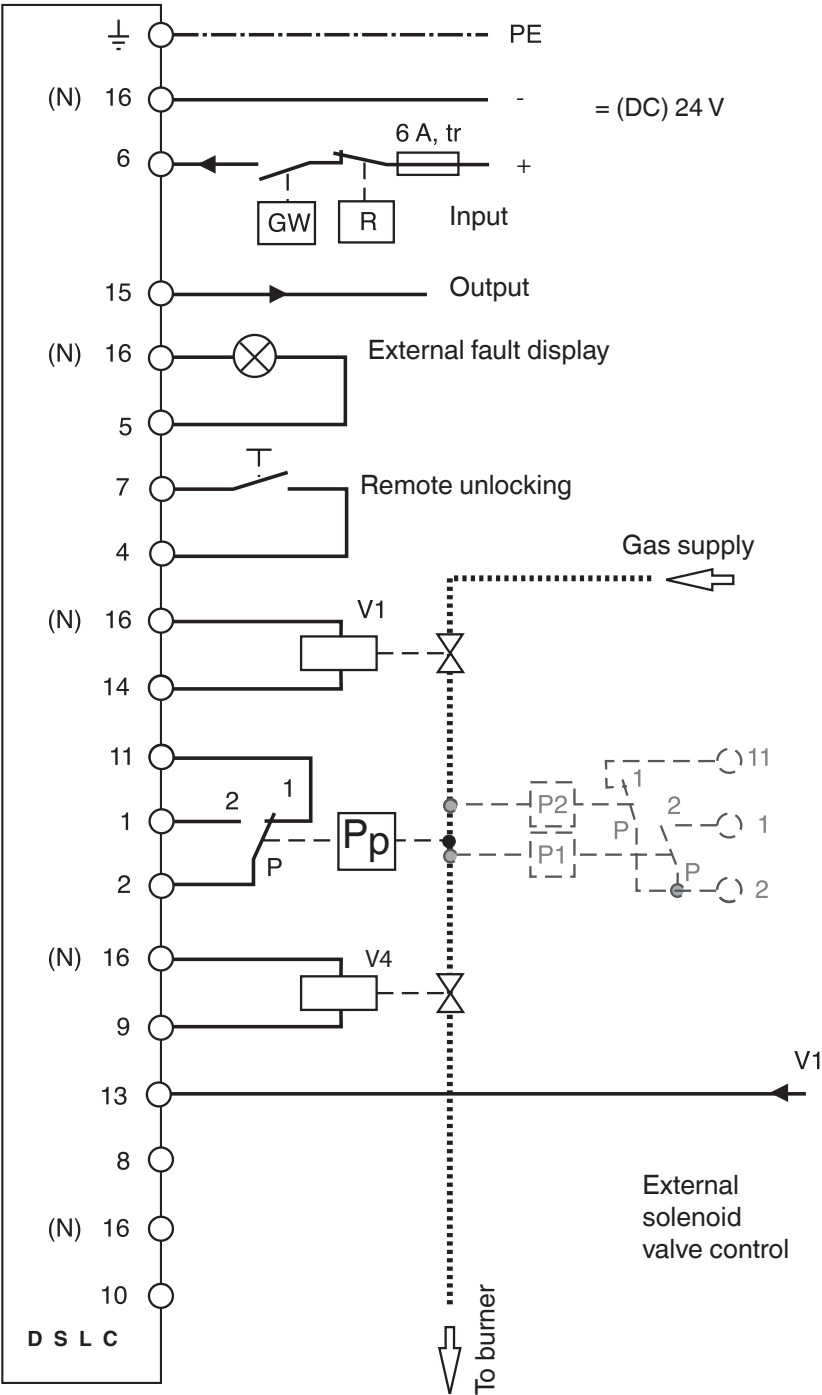
DSLCL (old)

- DSLCL valve check with
- Pilot valve (V4/NC)
 - Venting into the burner room



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Electrical connection DSLCL



DSLCL Connection

	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN 24 VDC +	4	
Fault display 24 VDC +	5	
Test request 24 VDC +	6	
Reset / OUT 24 VDC +	7	
free	8	
V4 / 24 VDC +	9	
free	10	
Pp / NC	11	
free	12	
Supply V1 / 24 VDC +	13	
V1 / 24 VDC +	14	
Release / 24 VDC +	15	
24 VDC -	16	

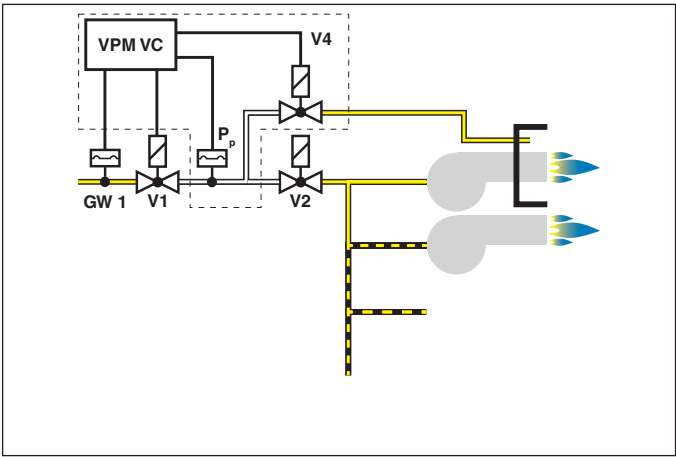
only VPM-VC

New only VPM

VPM (new)

VPM valve check with

- Pilot valve (V4/NC)
- Venting into the burner room

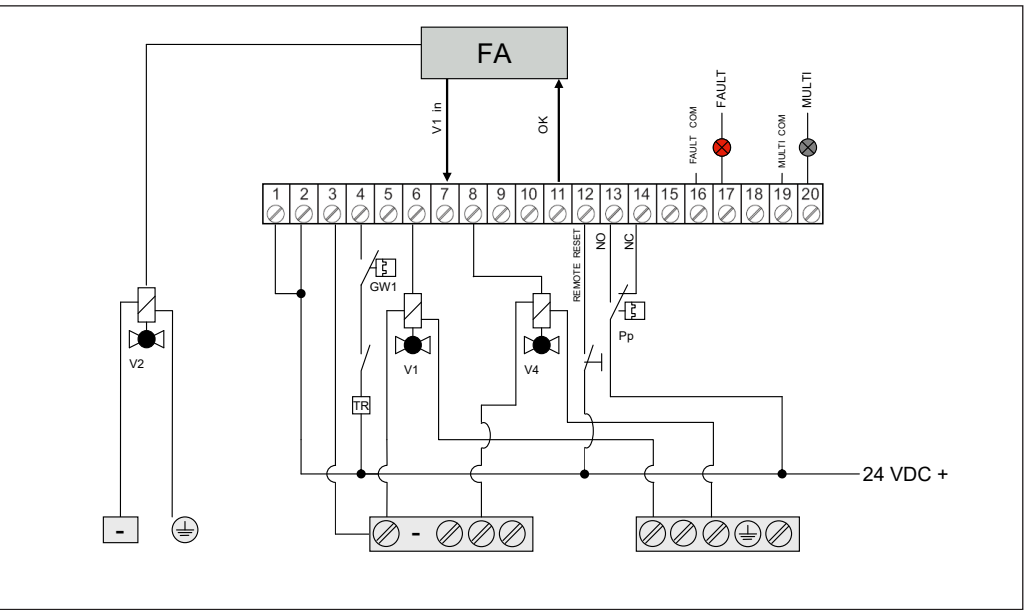


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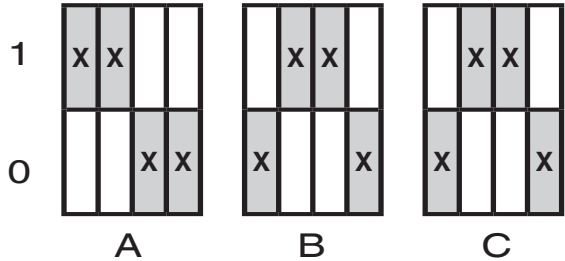


	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		24 VDC +
→	12	Reset / IN 24 VDC +
→	17	Fault OUT 24 VDC +
→	16	Fault IN 24 VDC +
→	4	Test request 24 VDC +
→		24 VDC +
→	8	V4 / 24 VDC +
→	14	Pp / NC
→	7	Supply V1 / 24 VDC +
→	6	V1 / 24 VDC +
→	11	Release / 24 VDC +
→	3	24 VDC -
	20	Multifunction output OUT 24 VDC +
	19	Multifunction output IN 24 VDC +
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	24 VDC +
	1	24 VDC +

Electrical connection VPM-VC

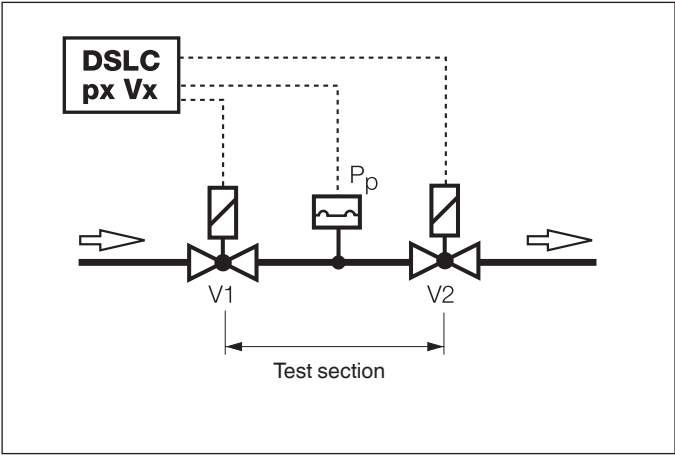


DIP switch assignment



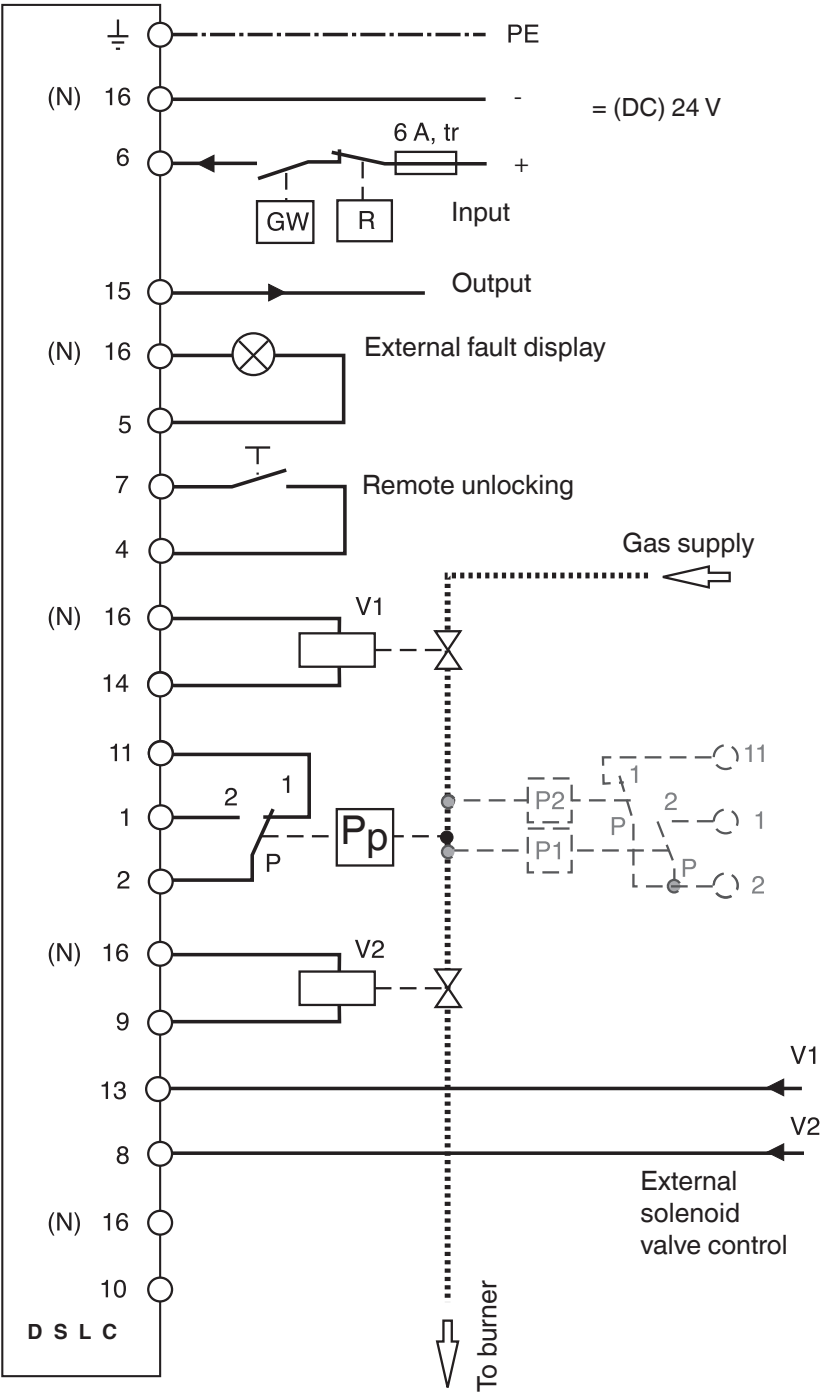
DSLCL (old)

- DSLCL valve check
- Venting into the burner room



Never perform any work on the device when it is under voltage. Observe public regulations.

Electrical connection DSLCL



DSLCL Connection

	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN 24 VDC +	4	
Fault display 24 VDC +	5	
Test request 24 VDC +	6	
Reset / OUT 24 VDC +	7	
Versorgung V2 / 24 VDC +	8	
V2 / 24 VDC +	9	
free	10	
Pp / NC	11	
free	12	
Supply V1 / 24 VDC +	13	
V1 / 24 VDC +	14	
Release / 24 VDC +	15	
24 VDC -	16	

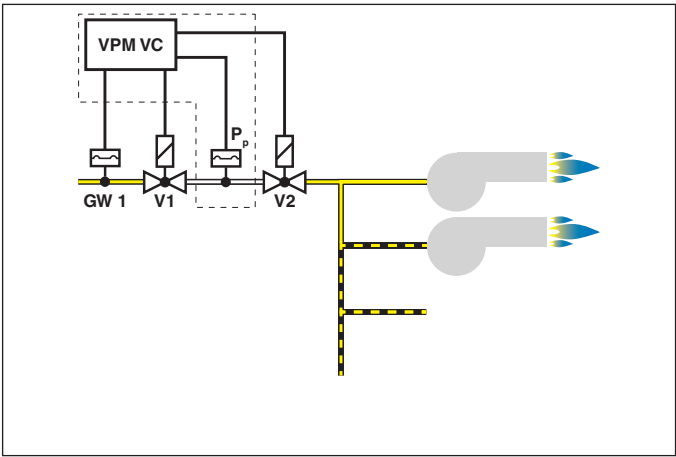
only VPM-VC

New only VPM

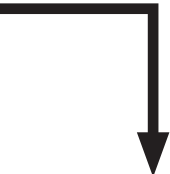
VPM (new)

DSLК valve check

- Venting into the burner room

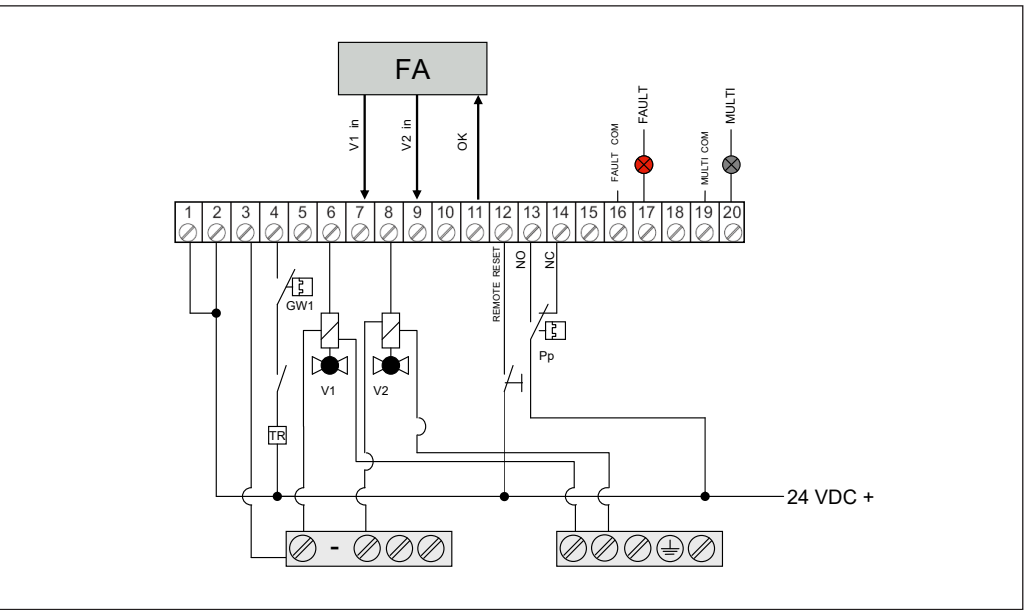


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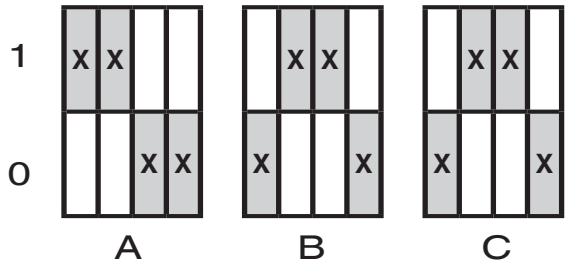


	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		24 VDC +
→	12	Reset / 24 VDC +
→	17	Fault OUT 24 VDC +
	16	Fault IN 24 VDC +
→	4	Test request 24 VDC +
→		24 VDC +
→	9	Supply V2 / 24 VDC +
→	8	V2 / 24 VDC +
→	14	Pp / NC
→	7	Supply V1 / 24 VDC +
→	6	V1 / 24 VDC +
→	11	Release / 24 VDC +
→	3	24 VDC -
	20	Multifunction output OUT 24 VDC +
	19	Multifunction output IN 24 VDC +
	18	free
	15	free
	10	free
	5	free
	2	24 VDC +
	1	24 VDC +

Electrical connection VPM-VC



DIP switch assignment



Configuring test pressure switches Pp1 and Pp2

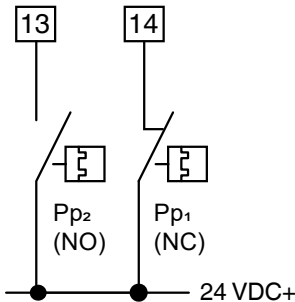
Instead of checking valve tightness with a test pressure switch Pp, two independent pressure switches can be used. This allows test pressure for V1 and V2 to be set individually.

Particularly with high input pressures and large test volumes, the total test time can be significantly reduced by using two pressure switches that can be set separately.

In contrast to only using one pressure switch Pp, for which both switch functions of the changeover contact are connected, when using two pressure monitors, only one contact (NO or NC) is connected at a time.

Test pressure switches for V1	Pp1	Opening (NC)
Test pressure switches for V2	Pp2	Closing (NO)
Pp1 checks for pressure rising	Tightness V1	Setting the pressure switch: Low pressure value
Pp2 checks for pressure falling	Tightness V2	Setting the pressure switch: High pressure value

Connecting two test pressure switches



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