GB

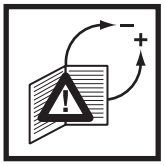
DUNGS®
Combustion Controls

Replacement instructions

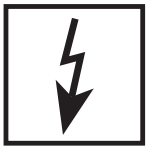
DSLC px Vx
by
VPM-VC

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.

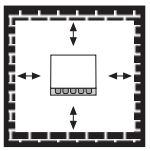


Any adjustment and application-specific adjustment values must be made in accordance with the appliance-/boiler manufacturers instructions.



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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Combustion Controls

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	

Content

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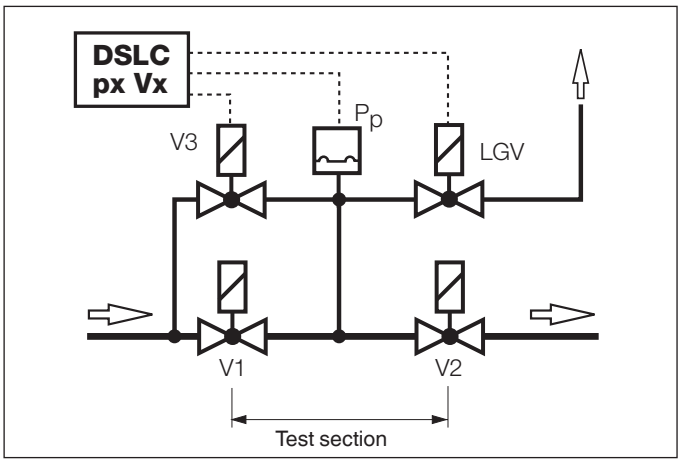
Rewiring according DSLC ➔ VPM-VC

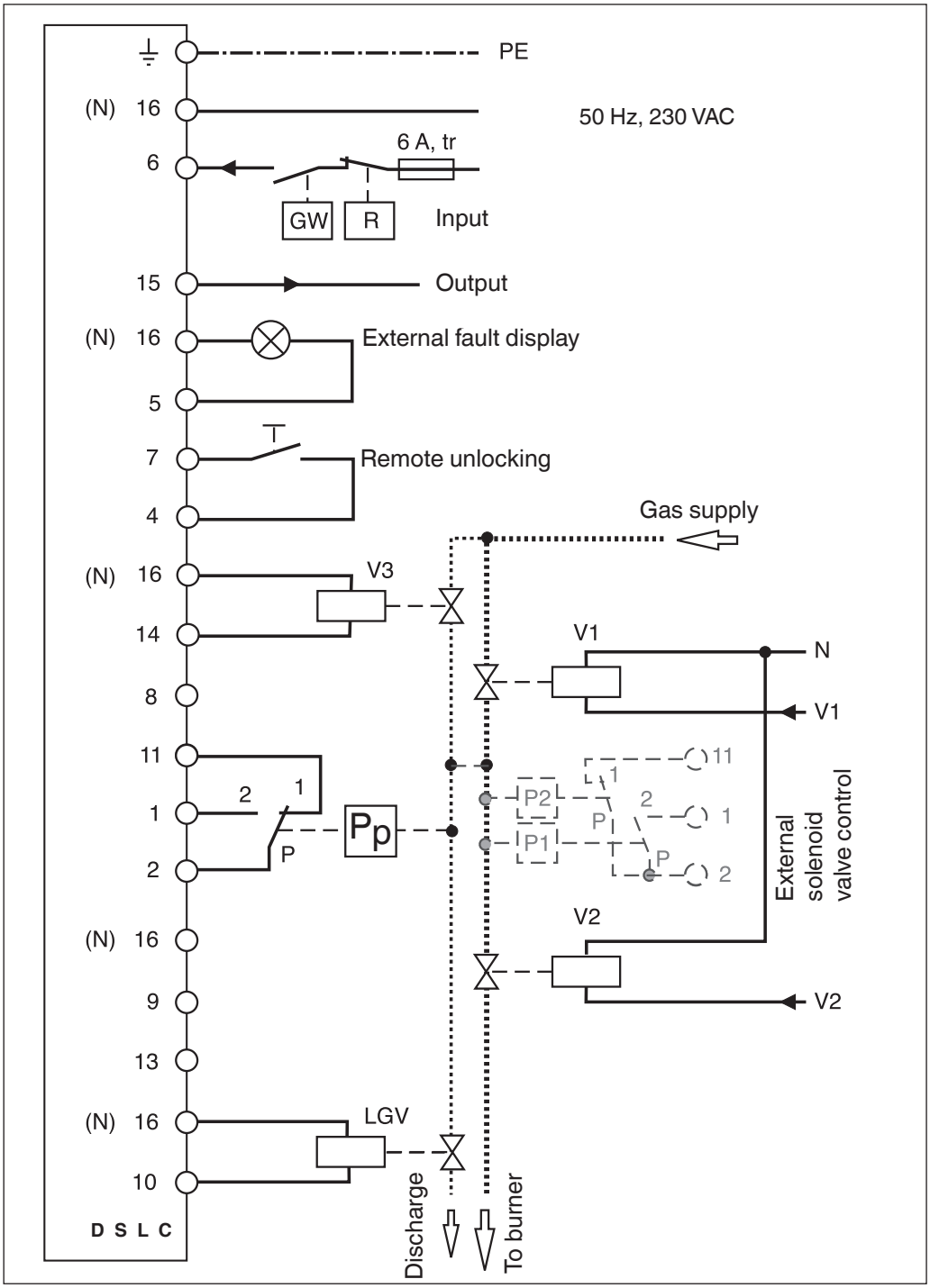
DSLC (old)

DSLC valve check with
- **Pilot valves**
- **Venting through roof**



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

Electrical connection DSLC



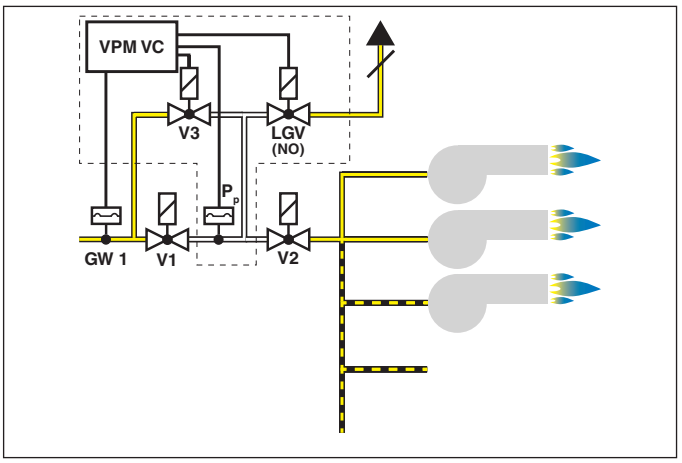
DSLC Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN	4	
Fault display 230 VAC	5	
Test request L1	6	
Reset / OUT	7	
free	8	
free	9	
LGV / 230 VAC	10	
Pp / NC	11	
free	12	
free	13	
V3 / 230 VAC	14	
Release / 230 VAC	15	
N	16	
only VPM-VC		

New only VPM

Rewiring according DSLC ➔ VPM-VC

VPM (new)

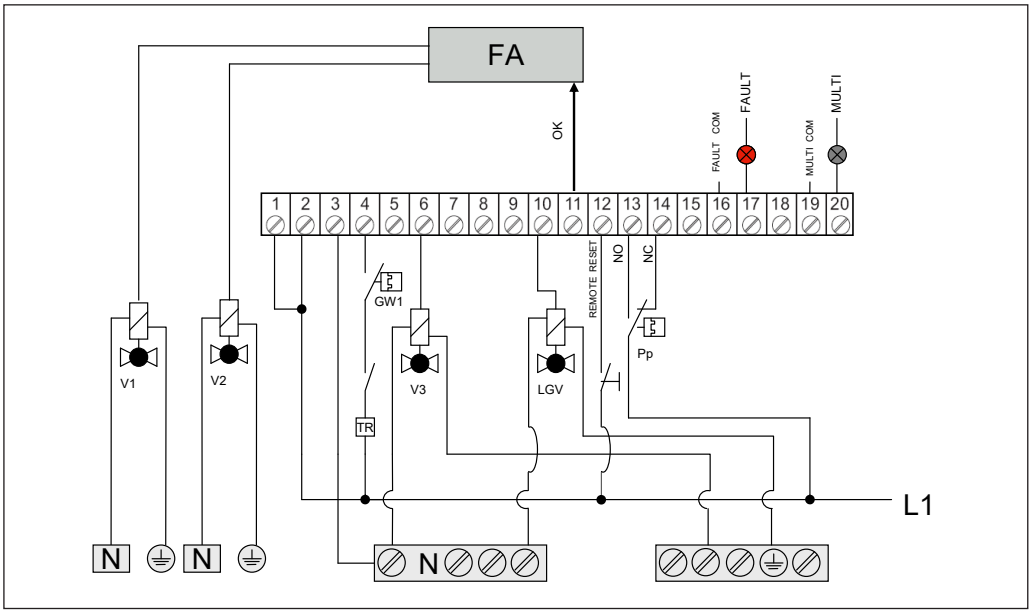
VPM valve check with
- **Pilot valves**
- **Venting through roof**



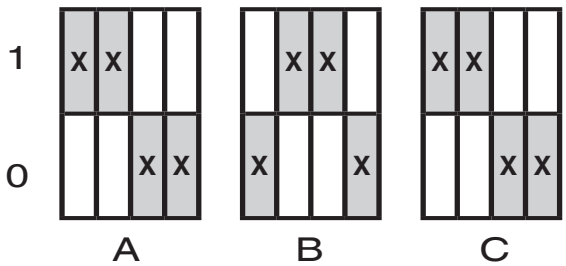
Never perform any work on the device when it is under voltage. Observe public regulations.

	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		L1
→	12	Reset / IN (from L1)
→	17	Fault OUT 230 VAC
→	16	Fault IN (from L1)
→	4	Test request L1
→		L1
→	10	LGV / 230 VAC
→	14	Pp / NC
→	6	V3 / 230 VAC
→	11	Release / 230 VAC
→	3	N
	20	Multifunction output OUT 230 VAC
	19	Multifunction output 230 VAC
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	L1 / time
	1	L1 / time

Electrical connection VPM-VC



DIP switch assignment



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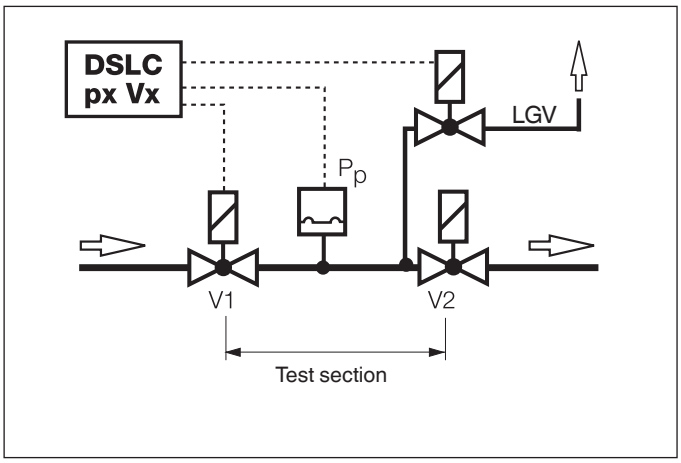
Rewiring according DSLC ➔ VPM-VC

DSLC (old)

DSLC valve check with
- **Pilot valve**
- **Venting through roof**



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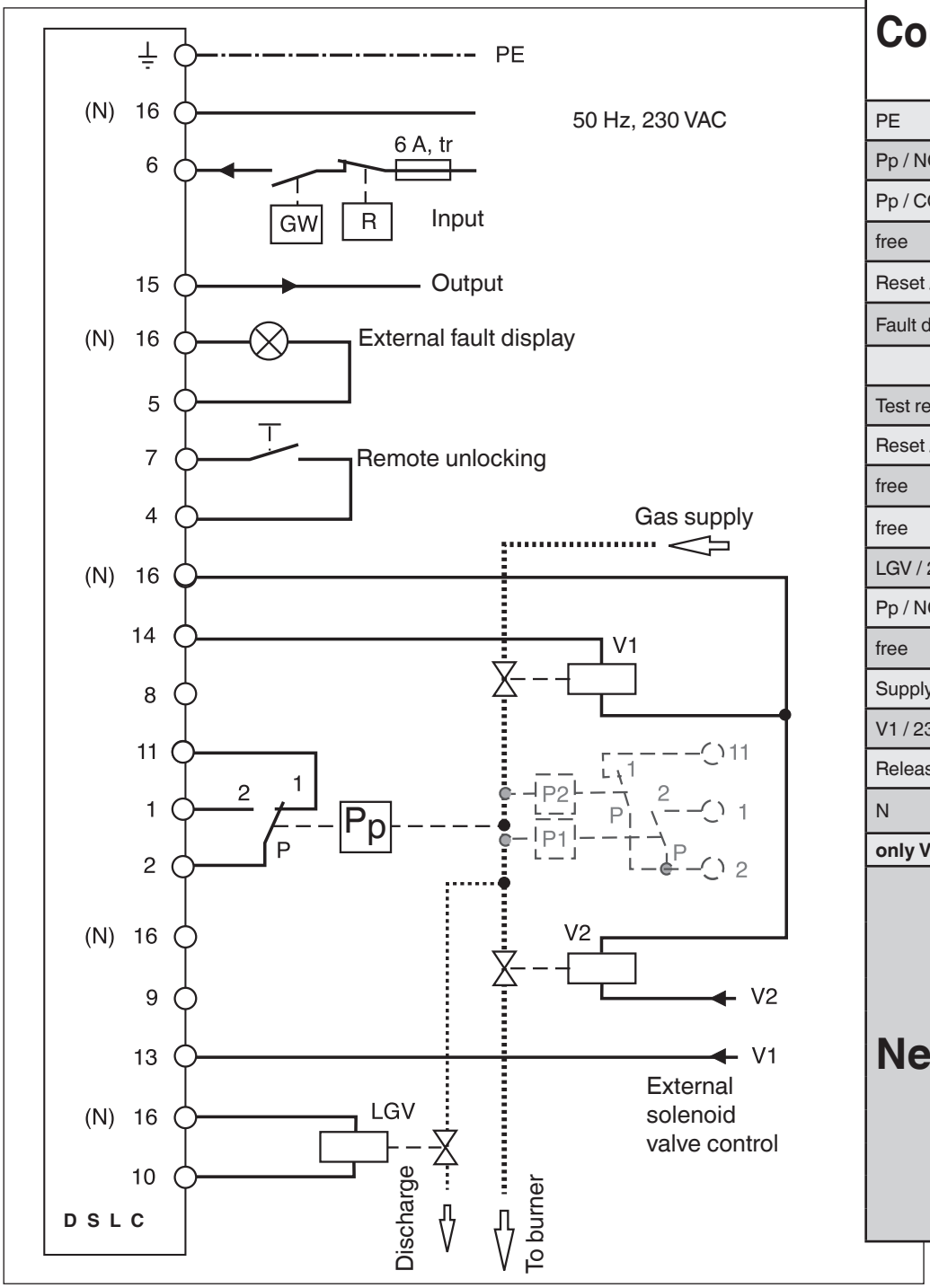

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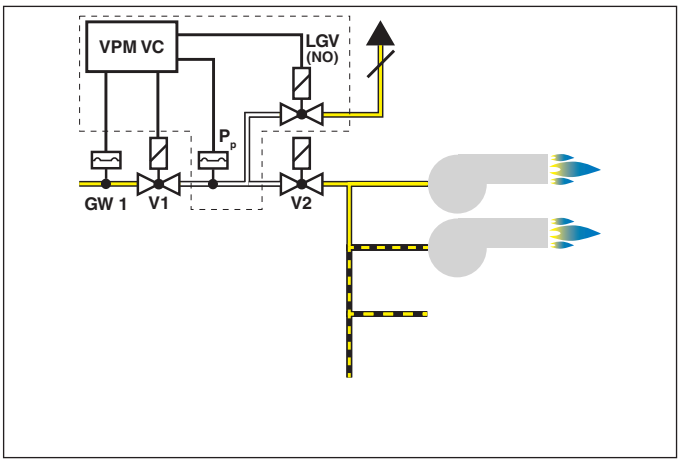
PE	PE	→
Pp / NO	1	→
Pp / COM	2	→
free	3	
Reset / IN	4	→
Fault display 230 VAC	5	→
		→
Test request L1	6	→
Reset / OUT	7	→
free	8	
free	9	
LGV / 230 VAC	10	→
Pp / NC	11	→
free	12	
Supply V1 / 230 VAC	13	→
V1 / 230 VAC	14	→
Release / 230 VAC	15	→
N	16	→
only VPM-VC		

New only VPM

Rewiring according DSLC ➔ VPM-VC

VPM (new)

VPM valve check with
- **Pilot valve**
- **Venting through roof**



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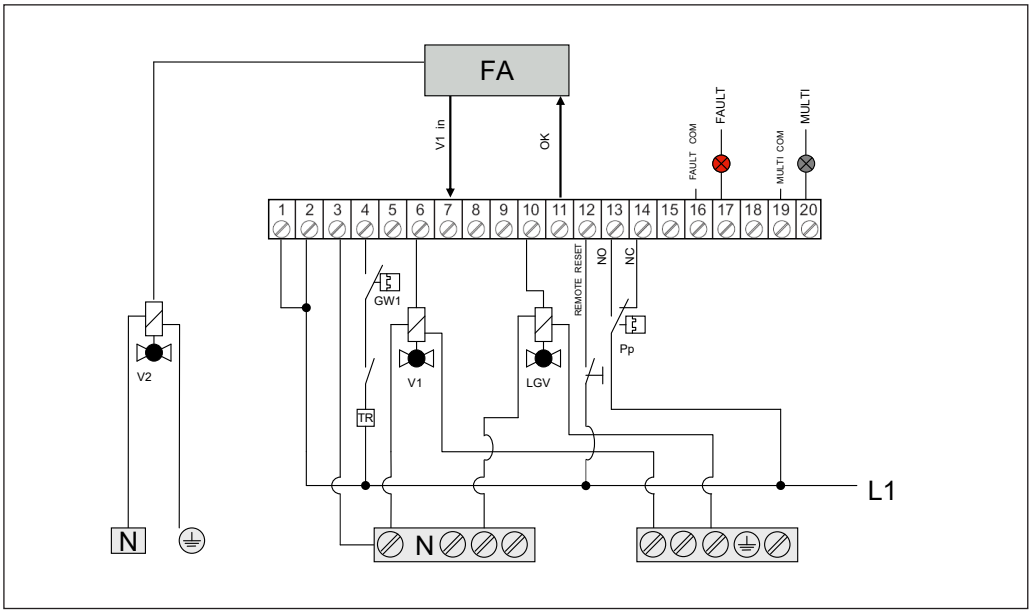
	on terminal	VPM Connection
	PE	PE
	13	Pp / NO
		L1
	12	Reset / IN (von L1)
	17	Fault OUT 230 VAC
	16	Fault IN (from L1)
	4	Test request L1
		L1
	10	LGV / 230 VAC
	14	Pp / NC
	6	V1 / 230 VAC
	11	Release / 230 VAC
	3	N
	20	Multifunction output OUT 230 VAC
	19	Multifunction output IN 230 VAC
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	L1 / time
	1	L1 / time

Electrical connection VPM-VC



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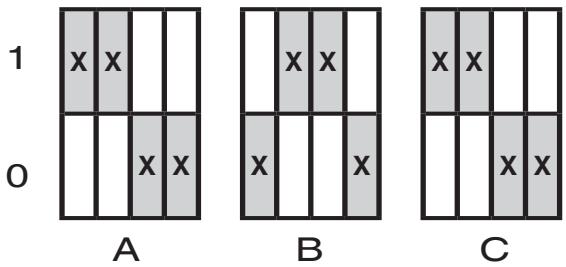

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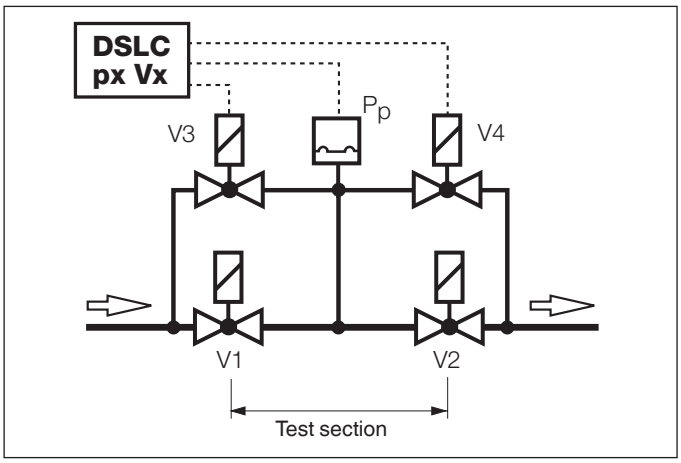
Rewiring according DSLC ➔ VPM-VC

DSLC (old)

DSLC valve check with
- **Pilot valves**
- **Venting into the burner room**



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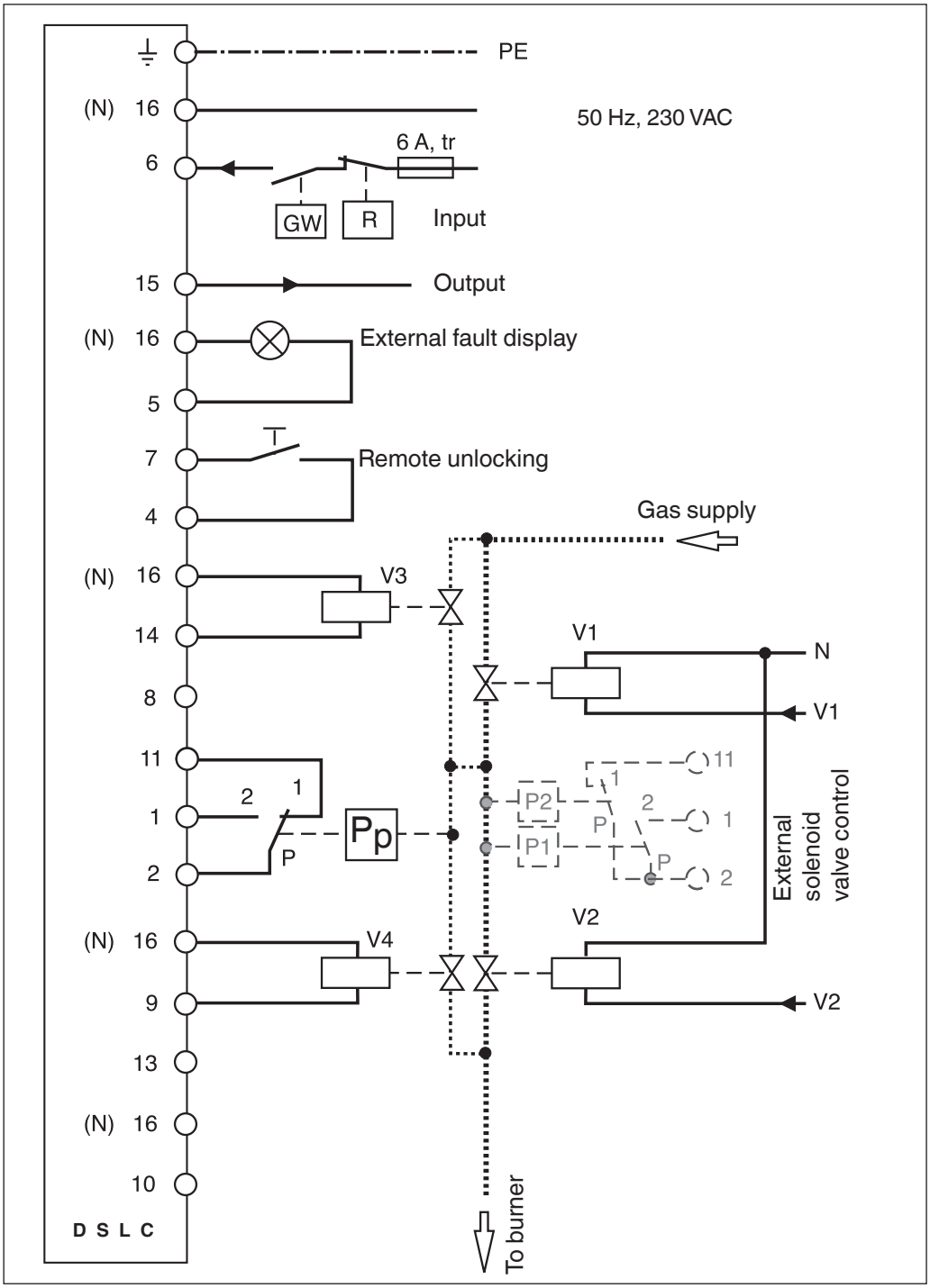
Electrical connection DSLC



DSLC Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN	4	
Fault display 230 VAC	5	
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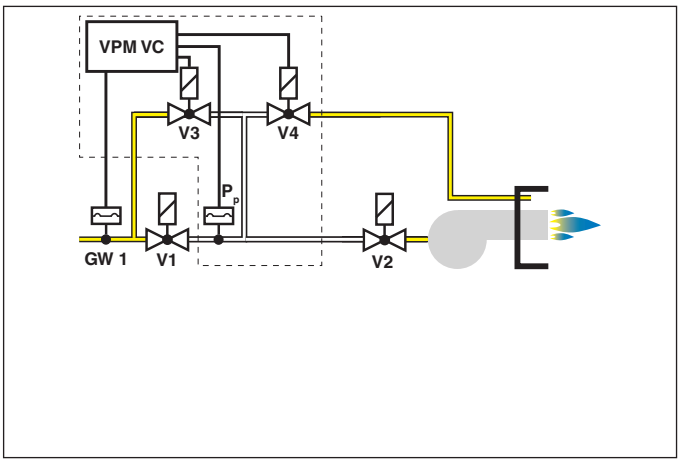
Reset / OUT	7	
free	8	
V4 / 230 VAC	9	
free	10	
Pp / NC	11	
free	12	
free	13	
V3 / 230 VAC	14	
Release / 230 VAC	15	
N	16	
only VPM-VC		

New only VPM

Rewiring according DSLC ➔ VPM-VC

VPM (new)

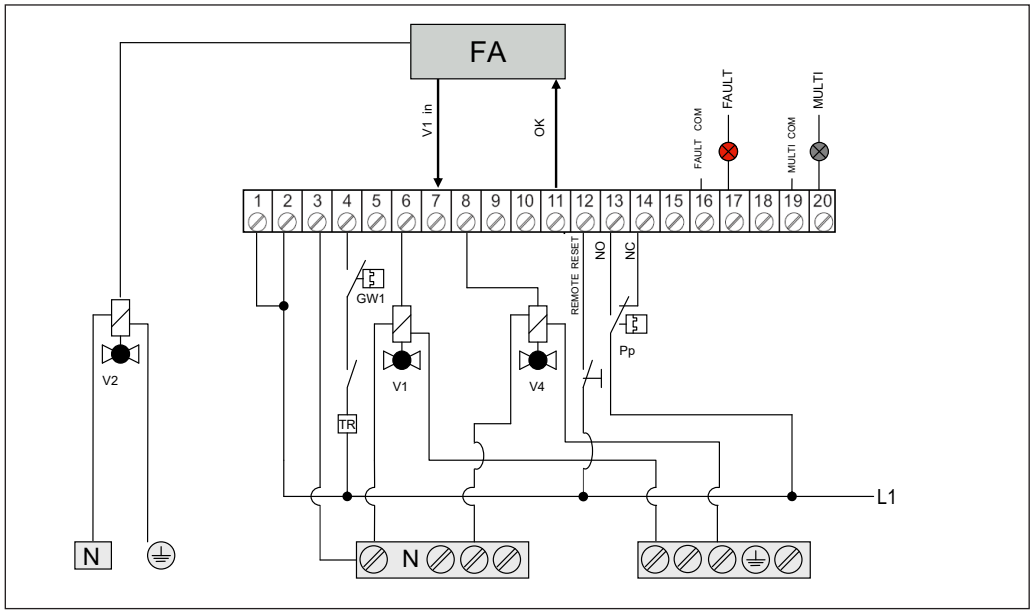
VPM valve check with
- **Pilot valves**
- **Venting into the burner room**



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

	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		L1
→	12	Reset / IN (from L1)
→	17	Fault OUT 230 VAC
→	16	Fault IN 24 (from L1)
→	4	Test request L1
→		L1
→	8	V2 / 230 VAC
→	14	Pp / NC
→	6	V3 / 230 VAC
→	11	Release / 230 VAC
→	3	N
	20	Multifunction output OUT 230 VAC
	19	Multifunction output IN 230 VAC
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	L1 / time
	1	L1 / time

Electrical connection VPM-VC



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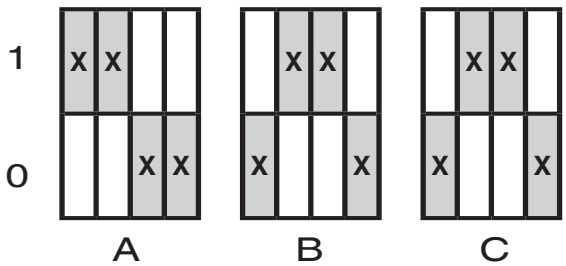

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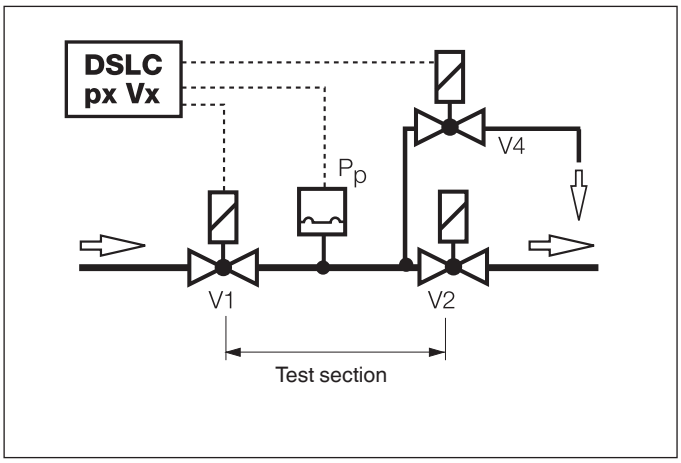
DSLC (old)

DSLC valve check with
- **Pilot valve**
- **Venting into the burner room**



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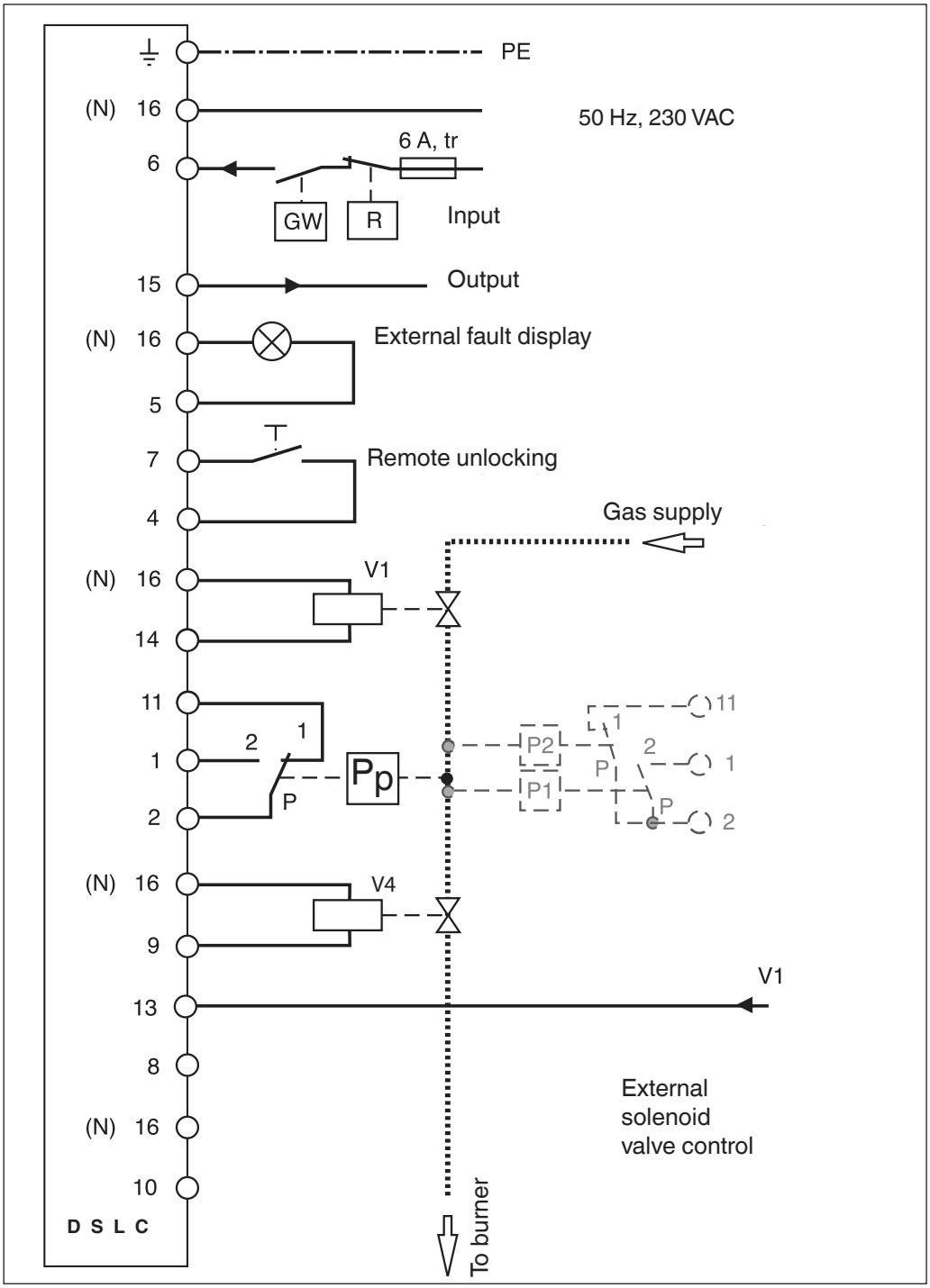
Electrical connection DSLC



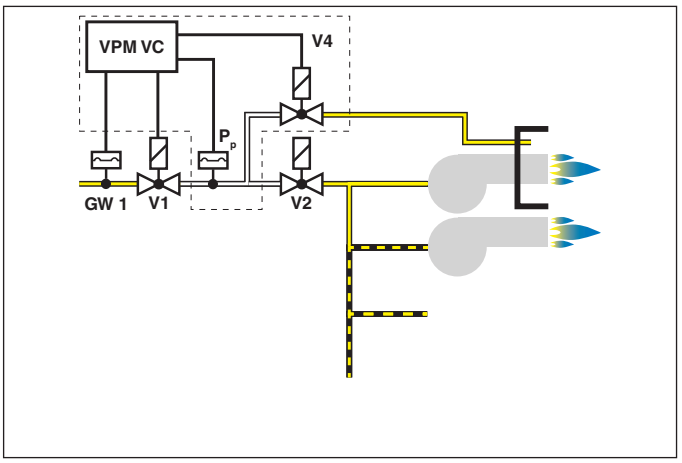
DSLC Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN	4	
Fault display 230 VAC	5	
Test request L1	6	
Reset / OUT	7	
free	8	
V4 / 230 VAC	9	
free	10	
Pp / NC	11	
free	12	
free	13	
V1 / 230 VAC	14	
Release / 230 VAC	15	
N	16	
only VPM-VC		

New only VPM

Rewiring according DSLC ➔ VPM-VC

VPM (new)

VPM valve check with
- **Pilot valve**
- **Venting into the burner room**



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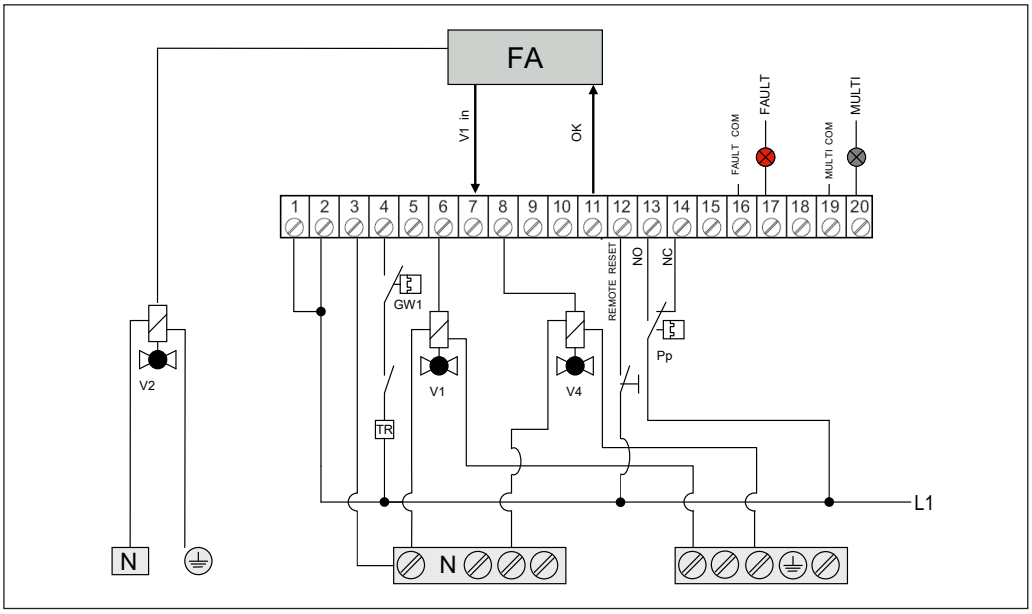
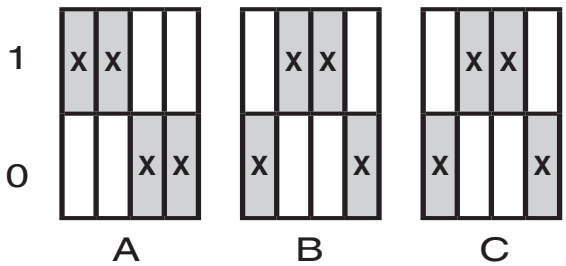
	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		L1
→	12	Reset / IN (from L1)
→	17	Fault OUT 230 VAC
→	16	Fault IN (from L1)
→	4	Test request L1
→		L1
→	8	V4 / 230 VAC
→	14	Pp / NC
→		
→	6	V1 / 230 VAC
→	11	Release / 230 VAC
→	3	N
	20	Multifunction output OUT 230 VAC
	19	Multifunction output IN 230 VAC
	18	free
	15	free
	9	free
	8	free
	7	free
	5	free
	2	L1 / time
	1	L1 / time

Electrical connection VPM-VC



DIP switch assignment



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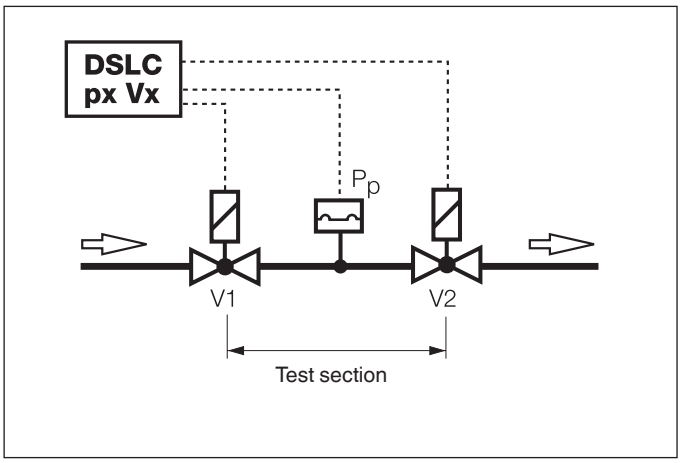
DSLC (old)

DSLC valve check

- **Venting into the burner room**



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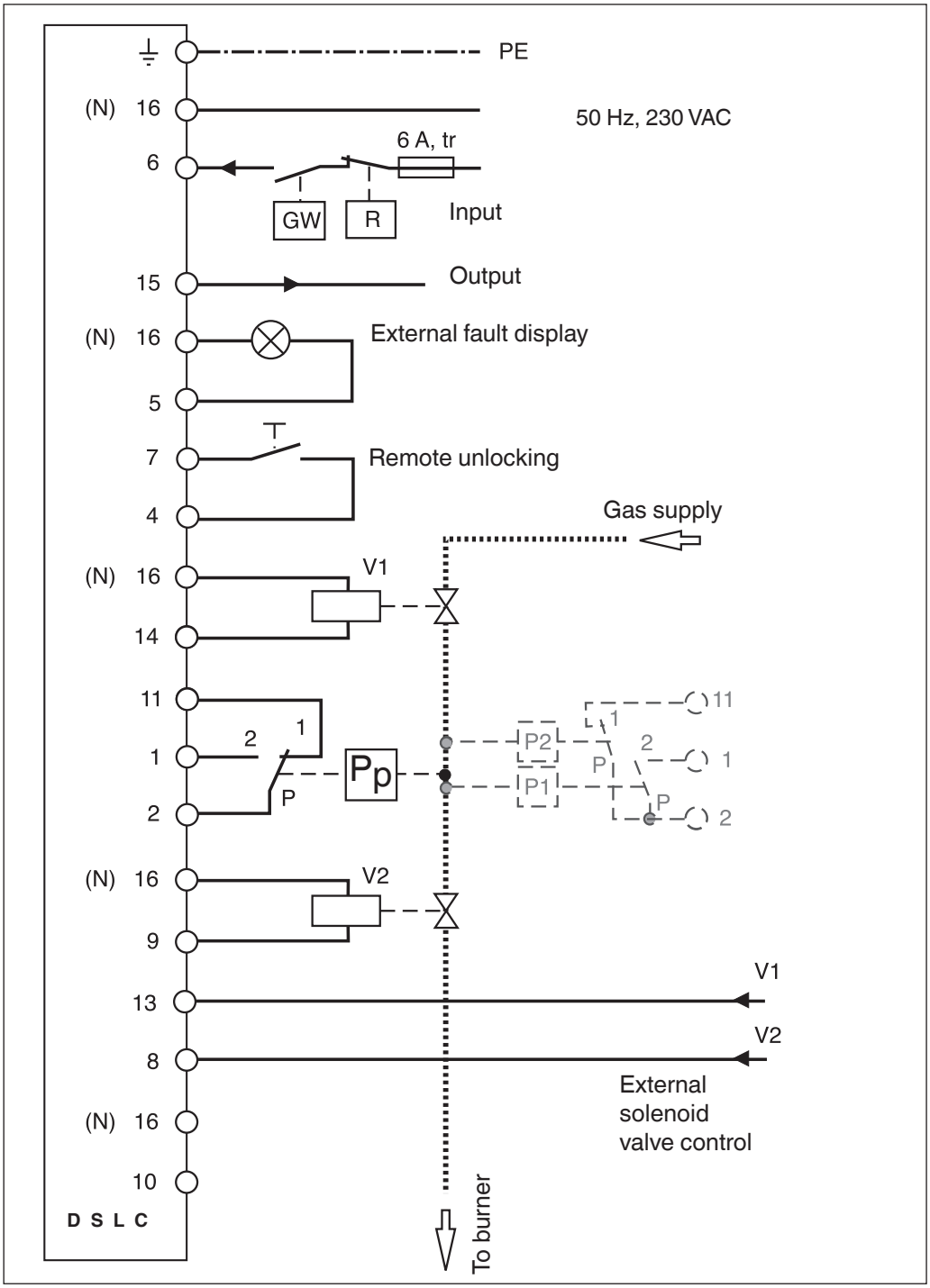
Electrical connection DSLC



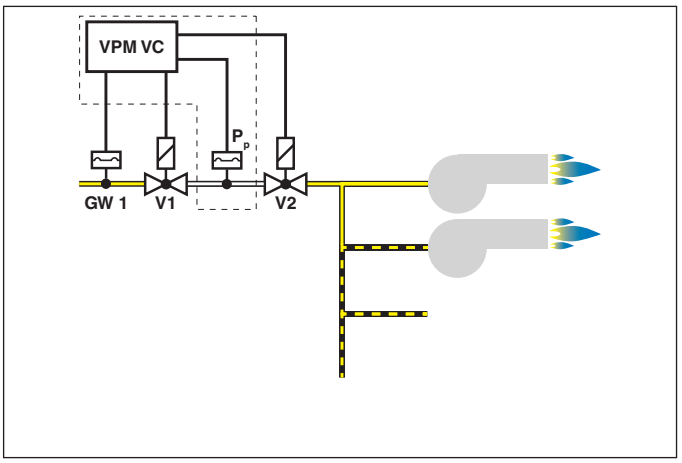
DSLC Connection	of terminal	rewiring according to
PE	PE	
Pp / NO	1	
Pp / COM	2	
free	3	
Reset / IN	4	
Fault display 230 VAC	5	
Test request L1	6	
Reset / OUT	7	
Versorgung V2 / 230 VAC	8	
V2 / 230 VAC	9	
free	10	
Pp / NC	11	
free	12	
Supply V1 / 230 VAC	13	
V1 / 230 VAC	14	
Release / 230 VAC	15	
N	16	
only VPM-VC		

New only VPM

Rewiring according DSLC ➔ VPM-VC

VPM (new)

DSLC valve check
- **Venting into the burner room**



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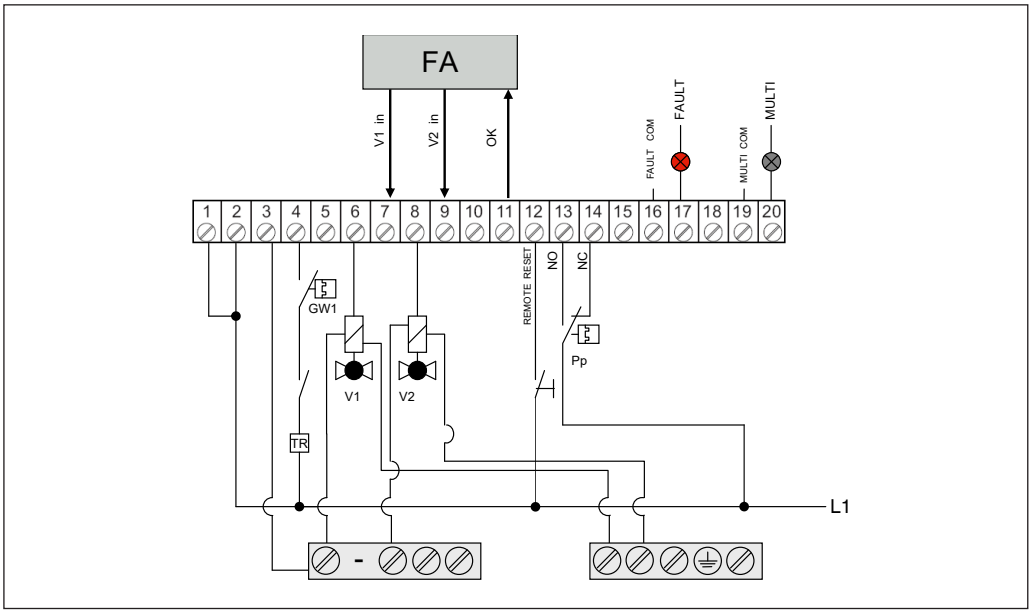
	on terminal	VPM Connection
→	PE	PE
→	13	Pp / NO
→		L1
→	12	Reset / IN (from L1)
→	17	Fault OUT 230 VAC
	16	Fault IN 230 VAC
→	4	Test request L1
→		L1
→	9	Supply V2 / 230 VAC
→	8	V2 / 230 VAC
→	14	Pp / NC
→	7	Supply V1 / 230 VAC
→	6	V1 / 230 VAC
→	11	Release / 230 VAC
→	3	N
	20	Multifunction output OUT 230 VAC
	19	Multifunction output IN 230 VAC
	18	free
	15	free
	10	free
	5	free
	2	L1 / time
	1	L1 / time

Electrical connection VPM-VC



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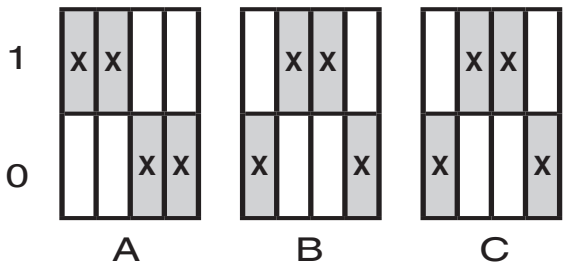

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Configuring test pressure switches Pp_1 and Pp_2

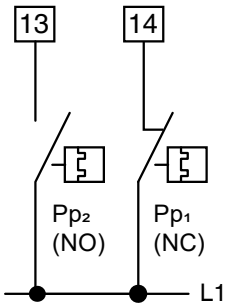
Instead of checking valve tightness with a test pressure switch Pp, two independent pressure switches can be used. This allows test pressure for V1 and V2 to be set individually.

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	Pp_1	Opening (NC)
Test pressure switches for V2	Pp_2	Closing (NO)
Pp_1 checks the pressure rise	Tightness V1	Setting the pressure switch: Low pressure value
Pp_2 checks the pressure drop	Tightness V2	Setting the pressure switch: High pressure value

Anschluss zwei Kontrolldruckwächter



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