

Product change notification (PCN)

Title / short description	Valve Connectors Type A - Change of the protection circuit from Zener-diode to Suppressor-diode
Affected article category	Cables and lines
Change category	Function, Characteristics, Marking
Change number	CBF240004-01
Reason for PCN/PDN Revision	Update EOP date

Purpose/objective of the change

Change of valve connectors type A from current Z-diode to more robust Suppressor-diode with better electrical properties

Detailed description of the change

In general, valve connectors enable safe and efficient control of electromagnetic hydraulic and pneumatic valves. A special feature of these valve connectors is the protective circuitry that is often already integrated. In most cases, solenoid valves are operated by relays. When inductive loads are switched on, voltage spikes can occur that exceed the rated voltage many times over. When switching off, depending on the current and the energy stored in the coil, a voltage with reversed polarity can be generated. These voltages can cause arcing at switching contacts as well as insulation failures. As a result of this overload, the relays become damaged, which can lead to malfunctions.

To prevent such failures, it is necessary to reduce voltage spikes and thereby protect the components. Protective circuits located close to the inductive load also reduces electromagnetic interference affecting signal and communication lines. Due to the importance of such protective circuits, the valve connectors and adapters type A with the current Z-diode are being changed to a more robust suppressor diode with better electrical properties.

Identifying characteristics

See attached item list

Start of Production (SOP)	-	Last Time Delivery (LTD)	-
Effective date (EOP)	2026-11-16	End of Service (EOSR)	-
End of Sales (EOS)	-		

Short-term change (< 6 months) or discontinuation (< 12 months), due to:

- | | | |
|---|---|--|
| ☐ Software / Firmware Bugfix | ☐ Short-term delivery stop by supplier | ☐ Short-term recall by supplier |
| ☐ Force majeure | ☐ Product improvement with customer benefits | |
| ☐ Others | | |

Attachments

- CBF240004-future product changes.pptx
- Material_list.csv
- PCN-CBF240004-01_EN

Material list

Item no.	Item Type	Hardware old	Firmware new	Item no.	Substitute item Type
1458091	SAC-10,0/0,2-116/2XA-1L-Z	8	9		
1052833	SAC-MS/ 2,0/0,11-116/2XA-1L-Z	4	5		
1458004	SAC- 5,0/0,1-116/2XA-1L-Z	8	9		
1413519	SAC-MS/ 1,5/0,1-116/2XA-1L-Z	4	5		
1458059	SAC-10,0/0,15-116/2XA-1L-Z	8	9		
1458088	SAC- 5,0/0,2-116/2XA-1L-Z	9	10		
1458062	SAC- 1,5/0,2-116/2XA-1L-Z	8	9		
1458017	SAC-10,0/0,1-116/2XA-1L-Z	8	9		
1457982	SAC- 1,5/0,1-116/2XA-1L-Z	8	9		
1457995	SAC- 3,0/0,1-116/2XA-1L-Z	8	9		
1407843	SAC- 5,0/0,4-116/2XA-1L-Z VA	7	8		
1003161	SAC-15,0/0,2-116/2XA-1L-Z	3	4		
1458075	SAC- 3,0/0,2-116/2XA-1L-Z	8	9		
1458020	SAC- 1,5/0,15-116/2XA-1L-Z	8	9		
1407846	SAC- 1,5/0,2-116/2XA-1L-Z VA	7	8		
1413945	SAC- 3,0/0,25-116/2XA-1L-Z	4	5		
1458033	SAC- 3,0/0,15-116/2XA-1L-Z	8	9		
1458046	SAC- 5,0/0,15-116/2XA-1L-Z	8	9		
1458538	SAC-3P-MR/A-1L-Z SCO	6	7		
1458156	SAC-MR/0,2-116/2XA-1L-Z SCO	9	10		
1458143	SAC-MR/0,15-116/2XA-1L-Z SCO	8	9		
1458130	SAC-MR/0,1-116/2XA-1L-Z SCO	8	9		
1458525	SAC-3P-MS/A-1L-Z SCO	7	8		
1458114	SAC-MS/0,15-116/2XA-1L-Z SCO	7	8		
1458101	SAC-MS/0,1-116/2XA-1L-Z SCO	7	8		
1458127	SAC-MS/0,2-116/2XA-1L-Z SCO	8	9		
1458583	SAC-4P-MS/A-1L-Z D SCO	7	8		
1736977	SAC-3P- 2,5-PVC/A-1L-Z OD	0	1		
1458091	SAC-10,0/0,2-116/2XA-1L-Z	8	9		
1052833	SAC-MS/ 2,0/0,11-116/2XA-1L-Z	4	5		
1458004	SAC- 5,0/0,1-116/2XA-1L-Z	8	9		
1413519	SAC-MS/ 1,5/0,1-116/2XA-1L-Z	4	5		
1458059	SAC-10,0/0,15-116/2XA-1L-Z	8	9		
1458088	SAC- 5,0/0,2-116/2XA-1L-Z	9	10		
1458114	SAC-MS/0,15-116/2XA-1L-Z SCO	7	8		
1458156	SAC-MR/0,2-116/2XA-1L-Z SCO	9	10		
1458143	SAC-MR/0,15-116/2XA-1L-Z SCO	8	9		
1458062	SAC- 1,5/0,2-116/2XA-1L-Z	8	9		

Item no.	Item Type	Hardware old	Firmware new	Item no.	Substitute item Type
1458017	SAC-10,0/0,1-116/2XA-1L-Z	8	9		
1457982	SAC- 1,5/0,1-116/2XA-1L-Z	8	9		
1457995	SAC- 3,0/0,1-116/2XA-1L-Z	8	9		
1458101	SAC-MS/0,1-116/2XA-1L-Z SCO	7	8		
1458130	SAC-MR/0,1-116/2XA-1L-Z SCO	8	9		
1003161	SAC-15,0/0,2-116/2XA-1L-Z	3	4		
1458075	SAC- 3,0/0,2-116/2XA-1L-Z	8	9		
1458020	SAC- 1,5/0,15-116/2XA-1L-Z	8	9		
1413945	SAC- 3,0/0,25-116/2XA-1L-Z	4	5		
1458033	SAC- 3,0/0,15-116/2XA-1L-Z	8	9		
1458046	SAC- 5,0/0,15-116/2XA-1L-Z	8	9		
1458127	SAC-MS/0,2-116/2XA-1L-Z SCO	8	9		
1407846	SAC- 1,5/0,2-116/2XA-1L-Z VA	7	8		
1407843	SAC- 5,0/0,4-116/2XA-1L-Z VA	7	8		
1824264	SAC-3P-MS/5,0-PUR/A-1L-Z SO	1	2		
1824259	SAC-3P-MS/2,0-PUR/A-1L-Z SO	1	2		
1130393	SAC-3P-30,0-PUO/A-1L-Z OD	1	2		
1407287	SAC-3P- 1,5-PUO/A-1L-Z OD	4	5		
1407288	SAC-3P- 3,0-PUO/A-1L-Z OD	4	5		
1407289	SAC-3P- 5,0-PUO/A-1L-Z OD	4	5		
1407290	SAC-3P-10,0-PUO/A-1L-Z OD	4	5		
1046637	SAC-3P- 3,0-PUO/A-1L-Z OD P+F	0	1		
1403553	SAC-2P-M12MR/0,6-PUR/A-1L-ZLUE	6	7		
1075471	SAC-2P-10,0-PVC/A-1L-Z	1	2		
1402327	SAC-3P-M 8MR/0,31-PUR/A-1L-Z	0	1		
1438749	SAC-2P- 2,0-PVC/A-1L-Z	7	8		
1405650	SAC-2P-M 8MS-A-1L-Z/.../...	4	5		
1440527	SAC-5P-Y/2X1,5-PUR/A-1L-Z 12	2	3		
1438752	SAC-2P- 4,6-PVC/A-1L-Z	7	8		
1246293	SAC-2P-M12MS/ 1,5-PUR/A-1L-Z NL	3	4		
1405650	SAC-2P-M 8MS-A-1L-Z/.../...	5	6		
1440527	SAC-5P-Y/2X1,5-PUR/A-1L-Z 12	2	3		
1434976	SAC-3P-MR-A-1L-Z SCO/.../...	7	8		
1434976	SAC-3P-MR-A-1L-Z SCO/.../...	8	9		
1435027	SAC-3P-A-1L-Z/.../...	3	4		
1435027	SAC-3P-A-1L-Z/.../...	4	5		
1434921	SAC-3P-MS-A-1L-Z SCO/.../...	7	8		
1434921	SAC-3P-MS-A-1L-Z SCO/.../...	8	9		
1453384	SAC-3P- 3,0-116/A-1L-Z	6	7		

Item no.	Item Type	Hardware / Firmware		Item no.	Substitute item Type
old	new				
1453397	SAC-3P- 5,0-116/A-1L-Z	6	7		
1736592	SAC-3P-60,0-116/A-1L-Z OL	0	1		
1412496	SAC-3P-3,0-116/A-1L-Z P+F	2	3		
1148343	SAC-3P-20,0-116/A-1L-Z P+F	1	2		
1453407	SAC-3P-10,0-116/A-1L-Z	6	7		
1453371	SAC-3P- 1,5-116/A-1L-Z	6	7		
1423436	SAC-3P-0,5-534/A-1L-Z AE	1	2		
1670022	SAC-3P-M12MS/0,6-PUR/A-1L-Z KS	1	2		
1670179	SAC-3P-M12MS/1,5-PUR/A-1L-Z KS	1	2		
1400698	SAC-3P-MS/1,0-PUR/A-1L-Z SCO	9	10		
1403750	SAC-3P-MR/0,3-PVC/A-1L-Z P+F	4	5		
1400771	SAC-3P-M12MS/3,0-PUR/A-1L-Z	7	8		
1402205	SAC-3P-M12MS/1,0-PUR/A-1L-ZLUE	5	6		
1573605	SAC-3P-M12MS/2,0-PUR/A-1L-S LP	7	8		
1405450	SAC-3P-MS/0,6-PUR/A-1L-Z P+F	6	7		
1439641	SAC-3P-M12MS/5,0-PUR/A-1L-Z	7	8		
1439353	SAC-3P-M12MR/1,5-PUR/A-1L-Z	7	8		
1434992	SAC-3P- 3,0-PUR/A-1L-Z	5	6		
1634038	SAC-5P-Y/2X0,8-PUR/A-1L-ZSCOLY	1	2		
1415905	SAC-3P- 3,0-PVC/A-1L-Z	3	4		
1425430	SAC-5P-Y/2X1,5-PUR/A-1L-Z SCO	3	4		
1439104	SAC-3P-15,0-280/A-1L-Z	5	6		
1075581	SAC-5P-M12Y/2X2,0-PUR/A-1L-Z	4	5		
1438833	SAC-3P-10,0-500/A-1L-Z	5	6		
1434918	SAC-3P-MS/ 3,0-PUR/A-1L-Z SCO	9	10		
1548082	SAC-3P-M12MS/ 2,6-240/A-1L-Z	2	3		
1075581	SAC-5P-M12Y/2X2,0-PUR/A-1L-Z	4	5		
1407853	SAC-3P-M12MS/1,5-PUR/A-1L-Z PF	5	6		
1438930	SAC-3P-M12MS/5,0-500/A-1L-Z	7	8		
1439599	SAC-3P-M12MS/2,0-PUR/A-1L-Z	7	8		
1434989	SAC-3P- 1,5-PUR/A-1L-Z	5	6		
1409243	SAC-3P-MR/0,3-PVC/A-1L-Z13 P+F	6	7		
1438794	SAC-3P- 5,0-500/A-1L-Z	5	6		
1402333	SAC-3P- 1,0-PVC/A-1L-Z	4	5		
1401438	SAC-3P-MS/1,3-PUR/A-1L-Z SCO	9	10		
1408231	SAC-3P-1,0-PUR/A-1L-Z P+F	3	4		
1439366	SAC-3P-M12MR/3,0-PUR/A-1L-Z	7	8		
1405432	SAC-3P-10,0-PUR/A-1L-Z P+F	3	4		
1522653	SAC-3P- 0,8-PUR/A-1L-Z 0,1 NLY	0	1		

Item no.	Item Type	Hardware / Firmware		Item no.	Substitute item Type
old	new				
1402354	SAC-3P-M12MS/0,6-PUR/A-1L-ZLUE	5	6		
1508970	SAC-3P-M12MS/1,8-PUR/A-1L-S	9	10		
1438586	SAC-3P-M12MS/1,0-PUR/A-1L-Z	7	8		
1405366	SAC-3P-1,5-PVC/A-1L-Z P+F	3	4		
1573602	SAC-3P-M12MS/0,3-PUR/A-1L-S LP	7	8		
1412146	SAC-3P-M12MS/5,0-PUR/A-1L-ZLUE	4	5		
1405452	SAC-3P-MS/1,0-PUR/A-1L-Z P+F	6	7		
1434905	SAC-3P-MS/ 1,5-PUR/A-1L-Z SCO	9	10		
1439010	SAC-3P- 0,8-PUR/A-1L-Z	5	6		
1435014	SAC-3P-10,0-PUR/A-1L-Z	5	6		
1355346	SAC-3P-10,0-PVC/A-1L-Z P+F	1	2		
1435001	SAC-3P- 5,0-PUR/A-1L-Z	5	6		
1438503	SAC-3P-M12MS/ 0,8-PUR/A-1L-Z	7	8		
1425430	SAC-5P-Y/2X1,5-PUR/A-1L-Z SCO	3	4		
1410127	SAC-3P-MR/0,6-PVC/A-1L-Z13 P+F	6	7		
1400707	SAC-3P-MR/ 5,0-PUR/A-1L-Z SCO	0	1		
1579527	SAC-3P-10,0-500/A-1L-Z KA	3	4		
1417651	SAC-3P-MR/1,0-PUR/A-1L-Z P+F	3	4		
1407868	SAC-3P-MR/0,6-PUR/A-1L-Z P+F	5	6		
1439340	SAC-3P-M12MR/0,6-PUR/A-1L-Z	7	8		
1438859	SAC-3P-15,0-PUR/A-1L-Z	5	6		
1434934	SAC-3P-MR/ 0,3-PUR/A-1L-Z SCO	9	10		
1406439	SAC-3P-20,0-PUR/A-1L-Z LP	3	4		
1400696	SAC-3P-MS/5,0-PUR/A-1L-Z SCO	9	10		
1405453	SAC-3P-MS/2,0-PUR/A-1L-Z P+F	6	7		
1439188	SAC-3P-20,0-PUR/A-1L-Z	5	6		
1438480	SAC-3P- 7,0-PUR/A-1L-Z	5	6		
1434963	SAC-3P-MR/ 3,0-PUR/A-1L-Z SCO	9	10		
1434950	SAC-3P-MR/ 1,5-PUR/A-1L-Z SCO	9	10		
1418593	SAC-3P- 5,0-PUR/A-1L-Z WD	1	2		
1434947	SAC-3P-MR/ 0,6-PUR/A-1L-Z SCO	9	10		
1405433	SAC-3P-2,0-PUR/A-1L-Z P+F	3	4		
1573604	SAC-3P-M12MS/1,0-PUR/A-1L-S LP	7	8		
1573629	SAC-3P-10,0-PUR/A-1L-S LP	6	7		
1634038	SAC-5P-Y/2X0,8-PUR/A-1L-ZSCOLY	1	2		
1077514	SAC-3P-MR/1,5PUR/A-1L-Z SCONLY	0	1		
1548073	SAC-3P-M12MS/ 2,4-240/A-1L-Z	2	3		
1410682	SAC-3P-MR/0,6-PVC/A-1L-Z P+F	4	5		
1408201	SAC-3P-2,5-PUR/A-1L-Z P+F	4	5		

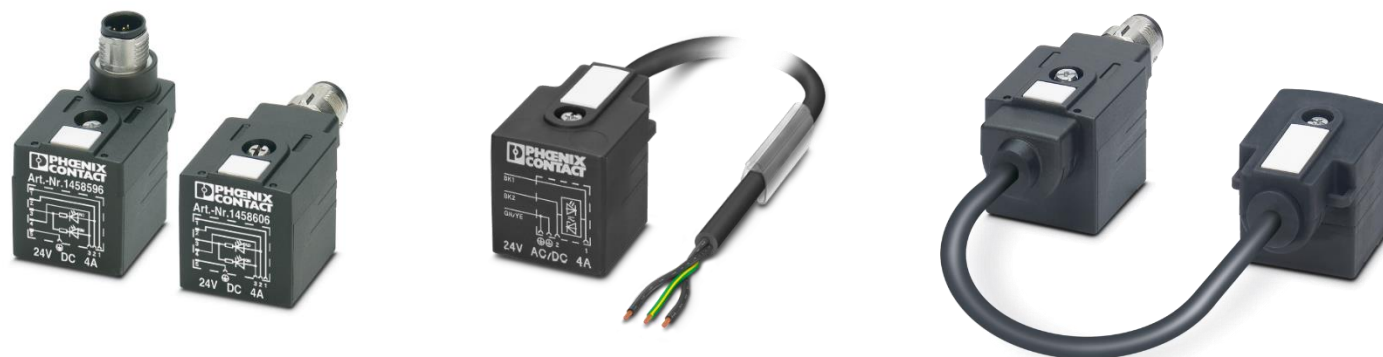
Item no.	Item Type	Hardware / Firmware		Item no.	Substitute item Type
old	new				
1631164	SAC-3P- 0,8-PUR/A-1L-Z AE NLY	3	4		
1416205	SAC-3P-MS/3,0-PUR/A-1L-Z P+F	3	4		
1407855	SAC-3P-M12MS/5,0-PUR/A-1L-Z PF	5	6		
1438684	SAC-3P- 1,5-PVC/A-1L-Z	5	6		
1438943	SAC-3P-M12MS/10,0-500/A-1L-Z	7	8		
1438781	SAC-3P-12,0-PVC/A-1L-Z	5	6		
1401351	SAC-3P-30,0-PUR/A-1L-Z	5	6		
1439492	SAC-3P-10,0-PVC/A-1L-Z	5	6		
1400769	SAC-3P-M12MS/0,6-PUR/A-1L-Z	7	8		
1439502	SAC-3P- 5,0-PVC/A-1L-Z	5	6		
1438972	SAC-3P-MR/10,0-PUR/A-1L-Z SCO	9	10		
1402170	SAC-3P-M12MS/2,0-PUR/A-1L-ZLUE	5	6		
1409770	SAC-3P-MS/ 2,4-240/A-1L-Z SCO	6	7		
1422945	D91PH000531	3	4		
1409771	SAC-3P-MS/ 2,6-240/A-1L-Z SCO	6	7		
1422945	D91PH000531	3	4		
1405434	SAC-3P-5,0-PUR/A-1L-Z P+F	3	4		
1403248	SAC-3P-M12MS/1,5-PUR/A-1L-ZLUE	5	6		
1398614	SAC-3P-MR/0,7PUR/A-1L-Z SCONLY	0	1		
1573603	SAC-3P-M12MS/0,6-PUR/A-1L-S LP	7	8		
1434895	SAC-3P-MS/ 0,6-PUR/A-1L-Z SCO	9	10		
1573636	SAC-3P- 2,0-PUR/A-1L-S LP	6	7		
1400768	SAC-3P-M12MS/0,3-PUR/A-1L-Z	7	8		
1401676	SAC-3P- 7,5-PUR/A-1L-Z	5	6		
1405364	SAC-3P-5,0-PVC/A-1L-Z P+F	4	5		
1321506	SAC-3P-3,0-PVC/A-1L-Z P+F	1	2		
1434882	SAC-3P-MS/ 0,3-PUR/A-1L-Z SCO	9	10		
1423960	SAC-3P-MS/1-PUR/A-1L-ZSCO 1NLY	2	3		
1400613	SAC-3P-3,0-PVC/A-1L-Z	5	6		
1408899	SAC-3P-5,0-280/A-1L-Z LP	3	4		
1573628	SAC-3P- 5,0-PUR/A-1L-S LP	6	7		
1400770	SAC-3P-M12MS/1,5-PUR/A-1L-Z	7	8		
1406454	SAC-3P-MR/2,0-PUR/A-1L-Z P+F	5	6		
1407856	SAC-3P-M12MS/10-PUR/A-1L-Z PF	5	6		

Item no.	Type	old	new	Substitute item	Replacement product designation	eCl@ss 13.0
1458091	SAC-10,0/0,2-116/2XA-1L-Z	8	9			27060312
1052833	SAC-MS/ 2,0/0,11-116/2XA-1L-Z	4	5			27060312
1458004	SAC- 5,0/0,1-116/2XA-1L-Z	8	9			27060312
1413519	SAC-MS/ 1,5/0,1-116/2XA-1L-Z	4	5			27060312
1458059	SAC-10,0/0,15-116/2XA-1L-Z	8	9			27060312
1458088	SAC- 5,0/0,2-116/2XA-1L-Z	9	10			27060312
1458062	SAC- 1,5/0,2-116/2XA-1L-Z	8	9			27060312
1458017	SAC-10,0/0,1-116/2XA-1L-Z	8	9			27060312
1457982	SAC- 1,5/0,1-116/2XA-1L-Z	8	9			27060312
1457995	SAC- 3,0/0,1-116/2XA-1L-Z	8	9			27060312
1407843	SAC- 5,0/0,4-116/2XA-1L-Z VA	7	8			27060312
1003161	SAC-15,0/0,2-116/2XA-1L-Z	3	4			27060312
1458075	SAC- 3,0/0,2-116/2XA-1L-Z	8	9			27060312
1458020	SAC- 1,5/0,15-116/2XA-1L-Z	8	9			27060312
1407846	SAC- 1,5/0,2-116/2XA-1L-Z VA	7	8			27060312
1413945	SAC- 3,0/0,25-116/2XA-1L-Z	4	5			27060312
1458033	SAC- 3,0/0,15-116/2XA-1L-Z	8	9			27060312
1458046	SAC- 5,0/0,15-116/2XA-1L-Z	8	9			27060312
1458538	SAC-3P-MR/A-1L-Z SCO	6	7			27440105
1458156	SAC-MR/0,2-116/2XA-1L-Z SCO	9	10			27060312
1458143	SAC-MR/0,15-116/2XA-1L-Z SCO	8	9			27060312
1458130	SAC-MR/0,1-116/2XA-1L-Z SCO	8	9			27060312
1458525	SAC-3P-MS/A-1L-Z SCO	7	8			27440105
1458114	SAC-MS/0,15-116/2XA-1L-Z SCO	7	8			27060312
1458101	SAC-MS/0,1-116/2XA-1L-Z SCO	7	8			27060312
1458127	SAC-MS/0,2-116/2XA-1L-Z SCO	8	9			27060312
1458583	SAC-4P-MS/A-1L-Z D SCO	7	8			27440105
1736977	SAC-3P- 2,5-PVC/A-1L-Z OD	0	1			27060312
1458091	SAC-10,0/0,2-116/2XA-1L-Z	8	9			27060312
1052833	SAC-MS/ 2,0/0,11-116/2XA-1L-Z	4	5			27060312
1458004	SAC- 5,0/0,1-116/2XA-1L-Z	8	9			27060312
1413519	SAC-MS/ 1,5/0,1-116/2XA-1L-Z	4	5			27060312
1458059	SAC-10,0/0,15-116/2XA-1L-Z	8	9			27060312
1458088	SAC- 5,0/0,2-116/2XA-1L-Z	9	10			27060312
1458114	SAC-MS/0,15-116/2XA-1L-Z SCO	7	8			27060312
1458156	SAC-MR/0,2-116/2XA-1L-Z SCO	9	10			27060312
1458143	SAC-MR/0,15-116/2XA-1L-Z SCO	8	9			27060312
1458062	SAC- 1,5/0,2-116/2XA-1L-Z	8	9			27060312
1458017	SAC-10,0/0,1-116/2XA-1L-Z	8	9			27060312
1457982	SAC- 1,5/0,1-116/2XA-1L-Z	8	9			27060312
1457995	SAC- 3,0/0,1-116/2XA-1L-Z	8	9			27060312
1458101	SAC-MS/0,1-116/2XA-1L-Z SCO	7	8			27060312
1458130	SAC-MR/0,1-116/2XA-1L-Z SCO	8	9			27060312
1003161	SAC-15,0/0,2-116/2XA-1L-Z	3	4			27060312
1458075	SAC- 3,0/0,2-116/2XA-1L-Z	8	9			27060312
1458020	SAC- 1,5/0,15-116/2XA-1L-Z	8	9			27060312
1413945	SAC- 3,0/0,25-116/2XA-1L-Z	4	5			27060312
1458033	SAC- 3,0/0,15-116/2XA-1L-Z	8	9			27060312
1458046	SAC- 5,0/0,15-116/2XA-1L-Z	8	9			27060312
1458127	SAC-MS/0,2-116/2XA-1L-Z SCO	8	9			27060312
1407846	SAC- 1,5/0,2-116/2XA-1L-Z VA	7	8			27060312
1407843	SAC- 5,0/0,4-116/2XA-1L-Z VA	7	8			27060312

1824264	SAC-3P-MS/5,0-PUR/A-1L-Z SO	1	2	27060312
1824259	SAC-3P-MS/2,0-PUR/A-1L-Z SO	1	2	27060312
1130393	SAC-3P-30,0-PUO/A-1L-Z OD	1	2	27060312
1407287	SAC-3P- 1,5-PUO/A-1L-Z OD	4	5	27060312
1407288	SAC-3P- 3,0-PUO/A-1L-Z OD	4	5	27060312
1407289	SAC-3P- 5,0-PUO/A-1L-Z OD	4	5	27060312
1407290	SAC-3P-10,0-PUO/A-1L-Z OD	4	5	27060312
1046637	SAC-3P- 3,0-PUO/A-1L-Z OD P+F	0	1	27060312
1403553	SAC-2P-M12MR/0,6-PUR/A-1L-ZLUE	6	7	27060311
1075471	SAC-2P-10,0-PVC/A-1L-Z	1	2	27060312
1402327	SAC-3P-M 8MR/0,31-PUR/A-1L-Z	0	1	27060312
1438749	SAC-2P- 2,0-PVC/A-1L-Z	7	8	27060312
1405650	SAC-2P-M 8MS-A-1L-Z/.../...	4	5	27060312
1440527	SAC-5P-Y/2X1,5-PUR/A-1L-Z 12	2	3	27060312
1438752	SAC-2P- 4,6-PVC/A-1L-Z	7	8	27060312
1246293	SAC-2P-M12MS/ 1,5-PUR/A-1L-Z NL	3	4	27060312
1405650	SAC-2P-M 8MS-A-1L-Z/.../...	5	6	27060312
1440527	SAC-5P-Y/2X1,5-PUR/A-1L-Z 12	2	3	27060312
1434976	SAC-3P-MR-A-1L-Z SCO/.../...	7	8	27060312
1434976	SAC-3P-MR-A-1L-Z SCO/.../...	8	9	27060312
1435027	SAC-3P-A-1L-Z/.../...	3	4	27060312
1435027	SAC-3P-A-1L-Z/.../...	4	5	27060312
1434921	SAC-3P-MS-A-1L-Z SCO/.../...	7	8	27060312
1434921	SAC-3P-MS-A-1L-Z SCO/.../...	8	9	27060312
1453384	SAC-3P- 3,0-116/A-1L-Z	6	7	27060312
1453397	SAC-3P- 5,0-116/A-1L-Z	6	7	27060312
1736592	SAC-3P-60,0-116/A-1L-Z OL	0	1	27060312
1412496	SAC-3P-3,0-116/A-1L-Z P+F	2	3	27060312
1148343	SAC-3P-20,0-116/A-1L-Z P+F	1	2	27060312
1453407	SAC-3P-10,0-116/A-1L-Z	6	7	27060312
1453371	SAC-3P- 1,5-116/A-1L-Z	6	7	27060312
1423436	SAC-3P-0,5-534/A-1L-Z AE	1	2	27060312
1670022	SAC-3P-M12MS/0,6-PUR/A-1L-Z KS	1	2	27060312
1670179	SAC-3P-M12MS/1,5-PUR/A-1L-Z KS	1	2	27060312
1400698	SAC-3P-MS/1,0-PUR/A-1L-Z SCO	9	10	27060312
1403750	SAC-3P-MR/0,3-PVC/A-1L-Z P+F	4	5	27060312
1400771	SAC-3P-M12MS/3,0-PUR/A-1L-Z	7	8	27060312
1402205	SAC-3P-M12MS/1,0-PUR/A-1L-ZLUE	5	6	27060312
1573605	SAC-3P-M12MS/2,0-PUR/A-1L-S LP	7	8	27060312
1405450	SAC-3P-MS/0,6-PUR/A-1L-Z P+F	6	7	27060312
1439641	SAC-3P-M12MS/5,0-PUR/A-1L-Z	7	8	27060312
1439353	SAC-3P-M12MR/1,5-PUR/A-1L-Z	7	8	27060312
1434992	SAC-3P- 3,0-PUR/A-1L-Z	5	6	27060312
1634038	SAC-5P-Y/2X0,8-PUR/A-1L-ZSCOLY	1	2	27060312
1415905	SAC-3P- 3,0-PVC/A-1L-Z	3	4	27060312
1425430	SAC-5P-Y/2X1,5-PUR/A-1L-Z SCO	3	4	27060312
1439104	SAC-3P-15,0-280/A-1L-Z	5	6	27060312
1075581	SAC-5P-M12Y/2X2,0-PUR/A-1L-Z	4	5	27060312
1438833	SAC-3P-10,0-500/A-1L-Z	5	6	27060312
1434918	SAC-3P-MS/ 3,0-PUR/A-1L-Z SCO	9	10	27060312
1548082	SAC-3P-M12MS/ 2,6-240/A-1L-Z	2	3	27060312
1075581	SAC-5P-M12Y/2X2,0-PUR/A-1L-Z	4	5	27060312
1407853	SAC-3P-M12MS/1,5-PUR/A-1L-Z PF	5	6	27060312

1438930	SAC-3P-M12MS/5,0-500/A-1L-Z	7	8	27060312
1439599	SAC-3P-M12MS/2,0-PUR/A-1L-Z	7	8	27060312
1434989	SAC-3P- 1,5-PUR/A-1L-Z	5	6	27060312
1409243	SAC-3P-MR/0,3-PVC/A-1L-Z13 P+F	6	7	27060312
1438794	SAC-3P- 5,0-500/A-1L-Z	5	6	27060312
1402333	SAC-3P- 1,0-PVC/A-1L-Z	4	5	27060312
1401438	SAC-3P-MS/1,3-PUR/A-1L-Z SCO	9	10	27060312
1408231	SAC-3P-1,0-PUR/A-1L-Z P+F	3	4	27060312
1439366	SAC-3P-M12MR/3,0-PUR/A-1L-Z	7	8	27060312
1405432	SAC-3P-10,0-PUR/A-1L-Z P+F	3	4	27060312
1522653	SAC-3P- 0,8-PUR/A-1L-Z 0,1 NLY	0	1	27060312
1402354	SAC-3P-M12MS/0,6-PUR/A-1L-ZLUE	5	6	27060312
1508970	SAC-3P-M12MS/1,8-PUR/A-1L-S	9	10	27060312
1438586	SAC-3P-M12MS/1,0-PUR/A-1L-Z	7	8	27060312
1405366	SAC-3P-1,5-PVC/A-1L-Z P+F	3	4	27060312
1573602	SAC-3P-M12MS/0,3-PUR/A-1L-S LP	7	8	27060312
1412146	SAC-3P-M12MS/5,0-PUR/A-1L-ZLUE	4	5	27060312
1405452	SAC-3P-MS/1,0-PUR/A-1L-Z P+F	6	7	27060312
1434905	SAC-3P-MS/ 1,5-PUR/A-1L-Z SCO	9	10	27060312
1439010	SAC-3P- 0,8-PUR/A-1L-Z	5	6	27060312
1435014	SAC-3P-10,0-PUR/A-1L-Z	5	6	27060312
1355346	SAC-3P-10,0-PVC/A-1L-Z P+F	1	2	27060311
1435001	SAC-3P- 5,0-PUR/A-1L-Z	5	6	27060312
1438503	SAC-3P-M12MS/ 0,8-PUR/A-1L-Z	7	8	27060312
1425430	SAC-5P-Y/2X1,5-PUR/A-1L-Z SCO	3	4	27060312
1410127	SAC-3P-MR/0,6-PVC/A-1L-Z13 P+F	6	7	27060312
1400707	SAC-3P-MR/ 5,0-PUR/A-1L-Z SCO	0	1	27060312
1579527	SAC-3P-10,0-500/A-1L-Z KA	3	4	27060312
1417651	SAC-3P-MR/1,0-PUR/A-1L-Z P+F	3	4	27060312
1407868	SAC-3P-MR/0,6-PUR/A-1L-Z P+F	5	6	27060312
1439340	SAC-3P-M12MR/0,6-PUR/A-1L-Z	7	8	27060312
1438859	SAC-3P-15,0-PUR/A-1L-Z	5	6	27060312
1434934	SAC-3P-MR/ 0,3-PUR/A-1L-Z SCO	9	10	27060312
1406439	SAC-3P-20,0-PUR/A-1L-Z LP	3	4	27060312
1400696	SAC-3P-MS/5,0-PUR/A-1L-Z SCO	9	10	27060312
1405453	SAC-3P-MS/2,0-PUR/A-1L-Z P+F	6	7	27060312
1439188	SAC-3P-20,0-PUR/A-1L-Z	5	6	27060312
1438480	SAC-3P- 7,0-PUR/A-1L-Z	5	6	27060312
1434963	SAC-3P-MR/ 3,0-PUR/A-1L-Z SCO	9	10	27060312
1434950	SAC-3P-MR/ 1,5-PUR/A-1L-Z SCO	9	10	27060312
1418593	SAC-3P- 5,0-PUR/A-1L-Z WD	1	2	27060312
1434947	SAC-3P-MR/ 0,6-PUR/A-1L-Z SCO	9	10	27060312
1405433	SAC-3P-2,0-PUR/A-1L-Z P+F	3	4	27060312
1573604	SAC-3P-M12MS/1,0-PUR/A-1L-S LP	7	8	27060312
1573629	SAC-3P-10,0-PUR/A-1L-S LP	6	7	27060312
1634038	SAC-5P-Y/2X0,8-PUR/A-1L-ZSCOLY	1	2	27060312
1077514	SAC-3P-MR/1,5PUR/A-1L-Z SCONLY	0	1	27060312
1548073	SAC-3P-M12MS/ 2,4-240/A-1L-Z	2	3	27060312
1410682	SAC-3P-MR/0,6-PVC/A-1L-Z P+F	4	5	27060312
1408201	SAC-3P-2,5-PUR/A-1L-Z P+F	4	5	27060312
1631164	SAC-3P- 0,8-PUR/A-1L-Z AE NLY	3	4	27060312
1416205	SAC-3P-MS/3,0-PUR/A-1L-Z P+F	3	4	27060312
1407855	SAC-3P-M12MS/5,0-PUR/A-1L-Z PF	5	6	27060312

1438684	SAC-3P- 1,5-PVC/A-1L-Z	5	6	27060312
1438943	SAC-3P-M12MS/10,0-500/A-1L-Z	7	8	27060312
1438781	SAC-3P-12,0-PVC/A-1L-Z	5	6	27060312
1401351	SAC-3P-30,0-PUR/A-1L-Z	5	6	27060312
1439492	SAC-3P-10,0-PVC/A-1L-Z	5	6	27060312
1400769	SAC-3P-M12MS/0,6-PUR/A-1L-Z	7	8	27060312
1439502	SAC-3P- 5,0-PVC/A-1L-Z	5	6	27060312
1438972	SAC-3P-MR/10,0-PUR/A-1L-Z SCO	9	10	27060312
1402170	SAC-3P-M12MS/2,0-PUR/A-1L-ZLUE	5	6	27060312
1409770	SAC-3P-MS/ 2,4-240/A-1L-Z SCO	6	7	27060312
1422945	D91PH000531	3	4	27060311
1409771	SAC-3P-MS/ 2,6-240/A-1L-Z SCO	6	7	27060312
1422945	D91PH000531	3	4	27060311
1405434	SAC-3P-5,0-PUR/A-1L-Z P+F	3	4	27060312
1403248	SAC-3P-M12MS/1,5-PUR/A-1L-ZLUE	5	6	27060312
1398614	SAC-3P-MR/0,7PUR/A-1L-Z SCONLY	0	1	27060312
1573603	SAC-3P-M12MS/0,6-PUR/A-1L-S LP	7	8	27060312
1434895	SAC-3P-MS/ 0,6-PUR/A-1L-Z SCO	9	10	27060312
1573636	SAC-3P- 2,0-PUR/A-1L-S LP	6	7	27060312
1400768	SAC-3P-M12MS/0,3-PUR/A-1L-Z	7	8	27060312
1401676	SAC-3P- 7,5-PUR/A-1L-Z	5	6	27060312
1405364	SAC-3P-5,0-PVC/A-1L-Z P+F	4	5	27060312
1321506	SAC-3P-3,0-PVC/A-1L-Z P+F	1	2	27060311
1434882	SAC-3P-MS/ 0,3-PUR/A-1L-Z SCO	9	10	27060312
1423960	SAC-3P-MS/1-PUR/A-1L-ZSCO 1NLY	2	3	27060312
1400613	SAC-3P-3,0-PVC/A-1L-Z	5	6	27060312
1408899	SAC-3P-5,0-280/A-1L-Z LP	3	4	27060312
1573628	SAC-3P- 5,0-PUR/A-1L-S LP	6	7	27060312
1400770	SAC-3P-M12MS/1,5-PUR/A-1L-Z	7	8	27060312
1406454	SAC-3P-MR/2,0-PUR/A-1L-Z P+F	5	6	27060311
1407856	SAC-3P-M12MS/10-PUR/A-1L-Z PF	5	6	27060312



Welcome

CBF240004

SAC Valve Connectors and Adapters Type A

Change of the protection circuit from Zener- to Suppressor-diode

Change of the protection circuit from Zener to Suppressor diode

In general, valve connectors enable safe and efficient control of electromagnetic hydraulic and pneumatic valves. A special feature of these valve connectors is the protective circuitry that is often already integrated. In most cases, solenoid valves are operated by relays. When inductive loads are switched on, voltage spikes can occur that exceed the rated voltage many times over. When switching off, depending on the current and the energy stored in the coil, a voltage with reversed polarity can be generated. These voltages can cause arcing at switching contacts as well as insulation failures. As a result of this overload, the relays become damaged, which can lead to malfunctions.

To prevent such failures, it is necessary to reduce voltage spikes and thereby protect the components. Protective circuits located close to the inductive load also reduces electromagnetic interference affecting signal and communication lines. Due to the importance of such protective circuits, the valve connectors and adapters type A with the current Z-diode are being changed to a more robust suppressor diode with better electrical properties.

The following slides describe the changes regarding both the technical characteristics and the appearance of the products.

Change of the protection circuit from Zener to Suppressor diode

Improvement of technical properties

Electrical property	Pulse power	Terminal voltage	Reverse voltage
Current Z-Diode	40 W (bei 100 µs impulse)	70 V (bei 2 mA constant current)	50 V
Future Suppressor-Diode	600 W (bei 10/1000 µs impulse)	77 V (bei 7,8 A constand current)	min. 53,2 V (at 1 mA constant current)

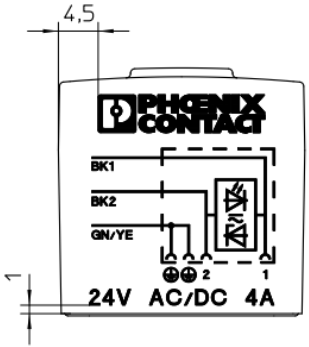
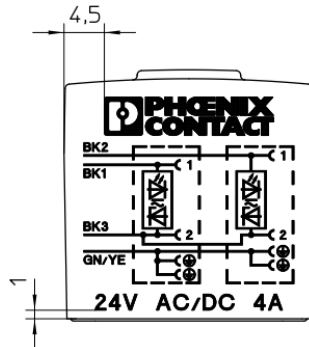
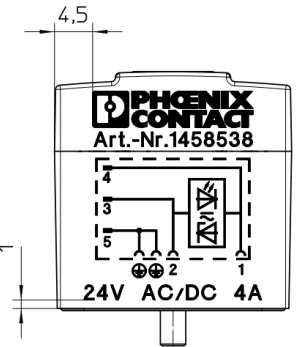
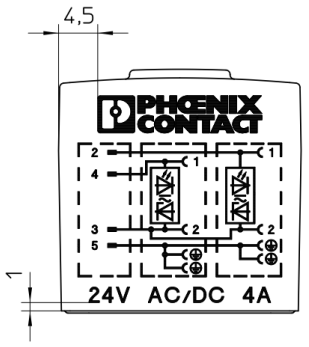
Change of the protection circuit from Zener to Suppressor diode

Change of the circuit diagram

Product Family	SAC Valve Connector Cable	SAC Double Valve Connector Cable	SAC Valve Adapter	SAC Double Valve Adapter
Current diagram				
Future diagram				

Change of the protection circuit from Zener to Suppressor diode

Change of the printing on the connector head

Product Family	SAC Valve Connector Cable	SAC Double Valve Connector Cable	Valve Adapter	Double Valve Adapter
Current diagram				
Future diagram	