This document contains

27.03.2020/ ALBE
Update: 22.04.2020

FAQ List VTSA-F-CB

- **Question (Q):** Does VTSA-F-CB have „EX" approval?
  Answer (A): No. VTSA-F-CB is not "EX" certified. At the moment there is no planning that it will become "EX" certified.

- **Q:** Does VTSA-F-CB have UL certification (status 03.03.2020)
  A: Up to now (03.03.2020) VTSA-F-CB has no UL certification. It is planned to achieve the same UL-certification as Festo has for VTSA/VTSA-F.

- **Q:** How many vacuum generators can be included into a VTSA-F-CB valve terminal?
  A: 4 vacuum generators can be included into a VTSA-F-CB valve terminal. Limitation is the electric supply. Flow rate is enough to support more than 4 Vacuum generators.

  BUT: if you have a request for > 4 pcs. of vacuum generators more often, please mirror these customer applications back SK-AE team. Then we can approach the development department.
  With some effort the chance could be there for a solution to control more than 4 vacuum generators – but at the moment this is not realized.

- **Q:** Which thread types does VTSA-F-CB support?
  A: VTSA-F-CB is currently only supporting G-type threats. It is planned to add NPT-threats as well. But this has to be realized with a separate project which is not yet started.

- **Q:** Is it possible to use alternatively competitor valves with ISO15407-2 or ISO5599-2 in new terminal VTSA-F-CB?
  A: No, it is not possible to use competitor ISO-valves. Even if we used ISO sub-bases, we would never test electrical compatibility to competitor ISO valves in combination with safety shut-down groups in VTSA-F-CB.

- **Q:** Which combinations of Pneumatic interface and CPX version is available? For which bus protocols?
  A: see table

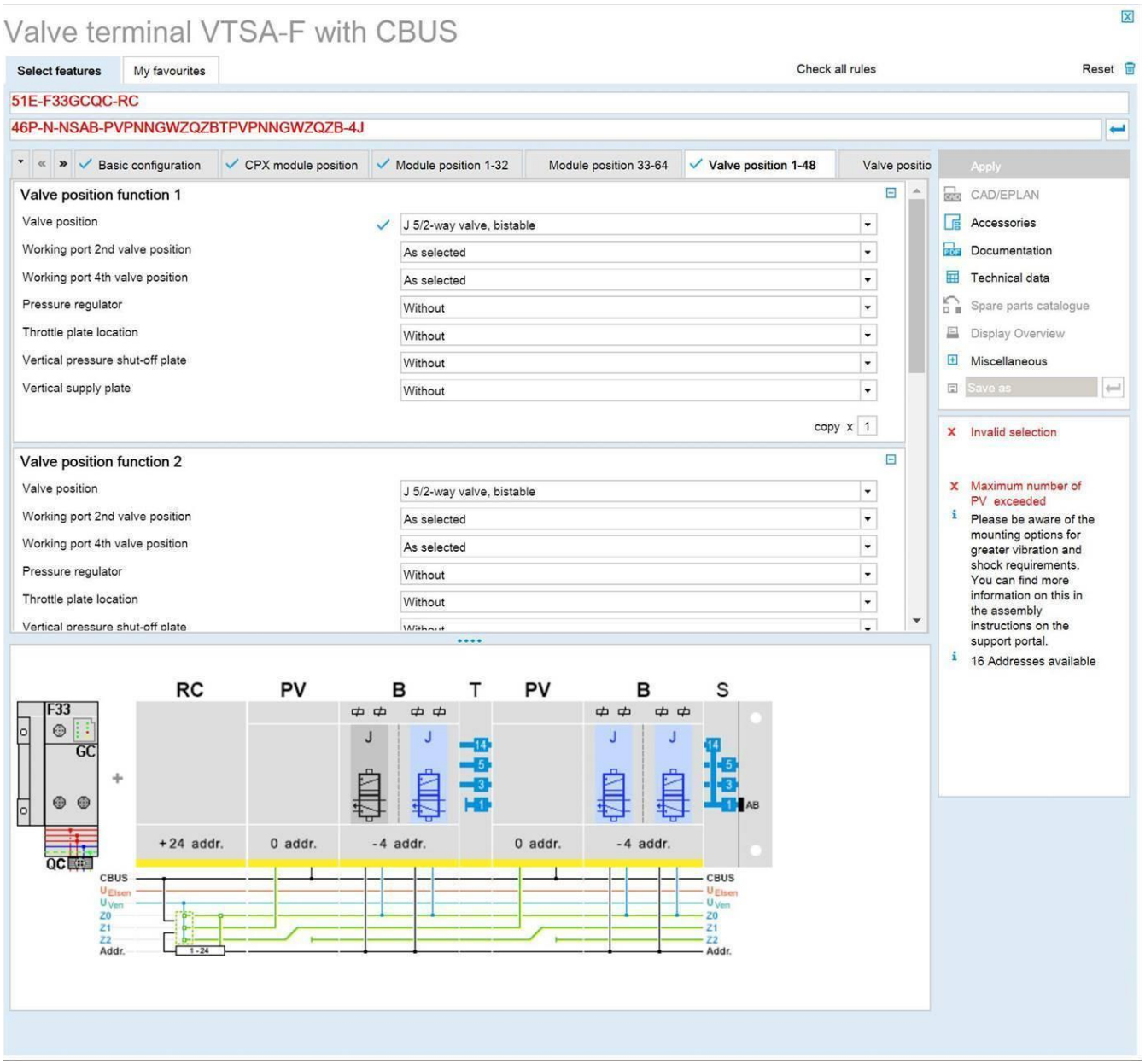
Pneumatic Interface	Part No	Code - Construction	CPX TYPE			Protocol			
			50E	51E	53E	PROFINET	PROFIBUS	EtherNet/IP	EtherCAT
	8082877	RA - Polymer	YES		YES	YES		Jun-20	Jun-20
	8082876	RA - Metal		YES	YES	YES		Jun-20	Jun-20
	8082879	RB - Polymer	YES		YES	YES		Jun-20	Jun-20
	8082878	RB - Metal		YES	YES	YES		Jun-20	Jun-20
	8068240	RC - Metal		YES			YES		
	8068241	RD - Metal		YES			YES		

Detailed information and hints regarding the configuration

- Configuration hint regarding Soft start valve:
  - How many soft start valves can be installed per VT and in which zones?
- Configuration PVPN vs. PSPM

Question (Q) by application engineer:

I have been looking and the configurators and I have a combination that I think should work but it says "no". What do you think?

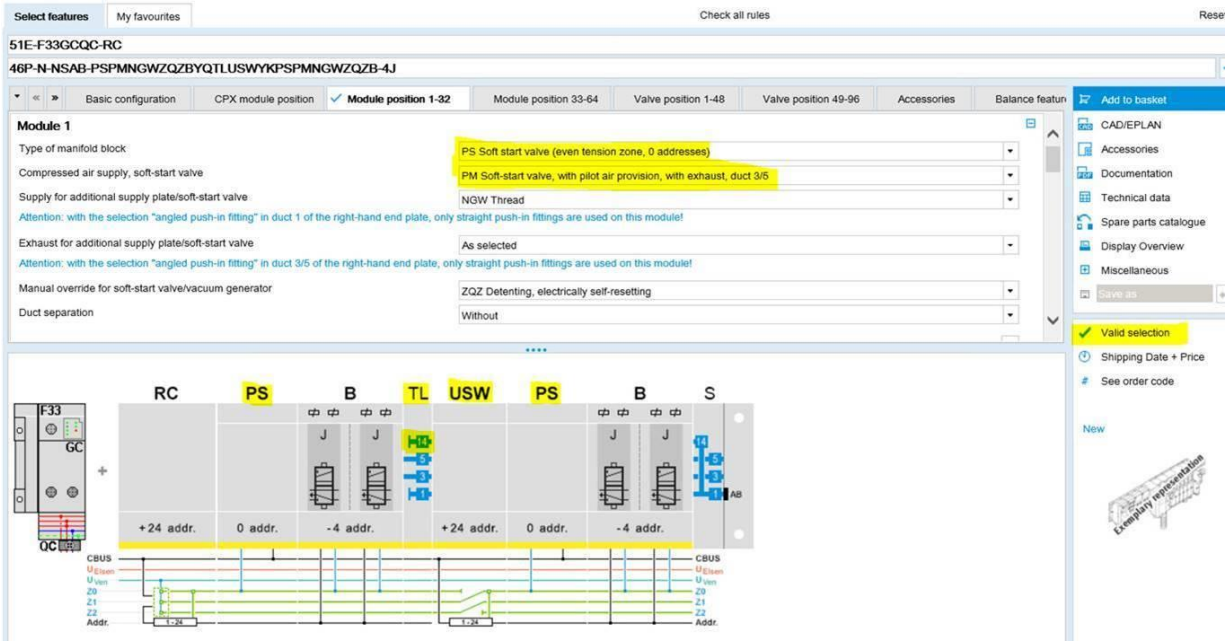


Answer (A) and hint by PM:

In your configuration, there are some mistakes:

1. If you would shut-down the right PVPN soft start valve (in your desired config.), then you would exhaust (through the right end plate) the pilot air for the complete terminal (as well for the left part). This would create a dependency which could affect incorrect operation of the working valves.
   That´s why (in general) we do not allow the right endplate as supplier for pilot air in combination with soft start valves.
2. The soft start valve PVPN can only be used <u>one-time for the complete terminal</u>:
   The own safe power zone is always in combination with a pilot air valve. In order to realize a <u>2-step safe shut-down</u>: 1.step=shut-down of pilot air valves and working valves (with keeping pressure in channel 1, cylinders maintain pressurized) and exhaust of pilot air, to realize PUS in cat.3 PLd (very often used for manual working stations). In emergency case when a cylinder does not reach end-position, or is clamping in not intended position, then 2.step is activated = shut-down of soft start valve and exhaust of channel 1, to realize STO in cat.2 PLd (only single channel solution).
   A second PVPN does NOT make sense, because there is max. 3 safe power switches possible. For a second PV, you would as well need a second pilot air valve / second power zone. Therefore 4 safe power zone would be needed. What we do not have.
3. For two or three soft start valves in one terminal only the version PSPM is possible (same power zone, with pilot air provision). Then always the duct separation inclusive channel 14 is needed (see above TL separation of 1+14). <u>Shut-down with one safe switch and exhaust of channel 1 and 14 on the same time.</u>
4. To start a new safe power zone (providing further 24 sol. adresses) you always need the USW module (see above).

PVPN = soft start valve with own power zone, without pilot air provision
PSPM = soft start valve with same power zone, with pilot air provision

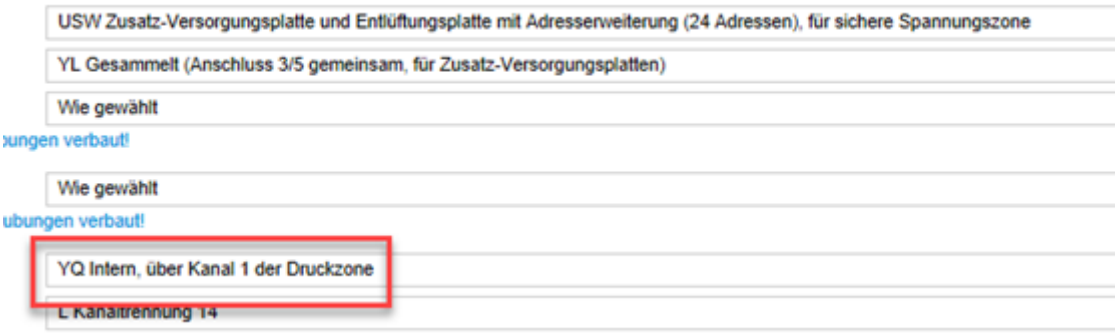


Following valid configuration, in addition to before mentioned example.

Valve terminal VTSA-F with CBUS
8073100
51E-F33GCQC-RC
46P-N-NSAB-PSPMNGWZQZBYQTLUSWYKPSPMNGWZQZB-4J
https://www.festo.com/cat/en-gb_gb/search?query=51E-F33GCQC-RC|46P-N-NSAB-PSPMNGWZQZBYQTLUSWYKPSPMNGWZQZB-4J

Q: Why does the pilot air valve need always a “USW” or “UW”?
A: For security reasons. A new pilot air valve always requires a separate voltage. It makes no sense to switch off the control air without a separate potential. Each control air zone should be switched off via a separate potential.

Q: Why do I need a “YQ” although I have already chosen a Pilot Air Valve with intern pilot air feed-in?



A: This selection is an auxiliary feature. Here we want to make people aware once again of where the control air comes from.

Q: In addition to point 3; only the combination PVPN and PSPM are possible
A: This is right. The Shut-Down in the combination PSPM is realized with one safe switch and exhaust of channel 1 and 14 on the same time.

Q: Why isn’t it possible to set a Pilot Air Valve at any position of the terminal?
Today it is just possible to place it left.
A: This option is neither available for the VTSA/-F nor for the VTSA-F-CB

Q: The hardware-configuration is in TIA done in the correct way but after the pneumatic interface RC are still differences and errors displayed in TIA
A: Please make sure that the FBs-firmware is Rev 35 or newer
The RC pneumatic interface is not supported in lower firmware's

Q: In FAS or FMT occurs an error because the model code from the vacuum module is wrong
A: In the development-process it was necessary to change the MC from 100 to 185.
Only some samples are affected. Please change the vacuum module.