

9 Appendix

9.1 Technical information

Type	
Vacuum controller	VACUU·SELECT
Software version	V1.07 / V1.00

9.1.1 Technical data

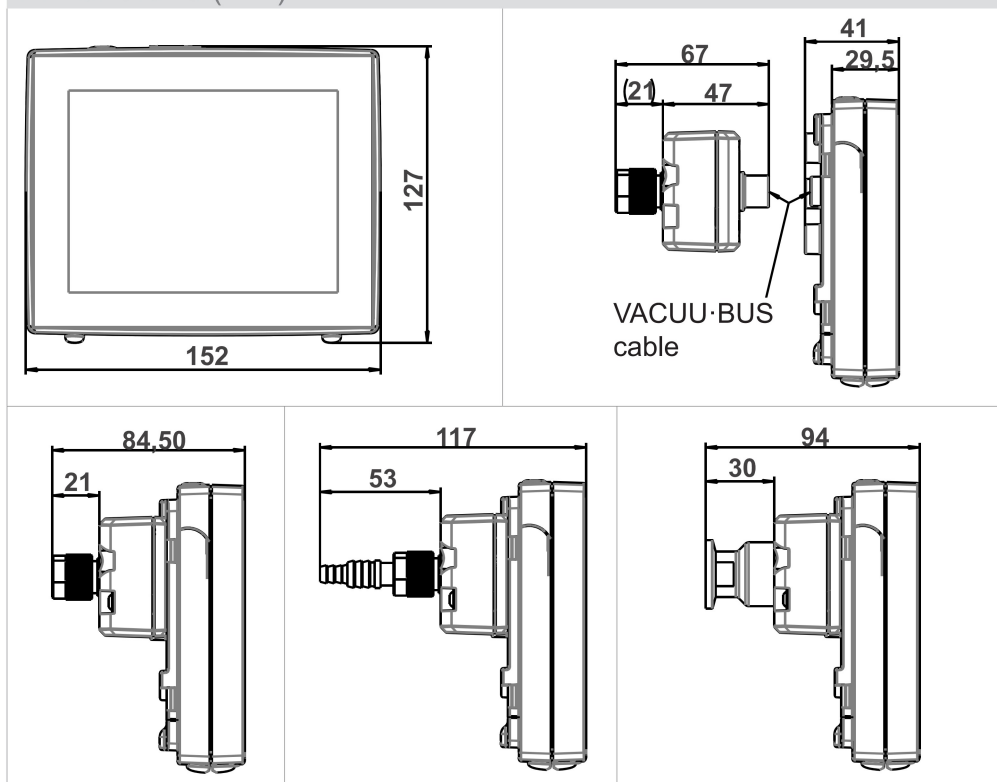
Technical data

Ambient conditions (US)		
Working temperature	10-40 °C	50–104 °F
Storage/transport temperature	-10-60 °C	14-140 °F
Max. altitude	2000 m above sea level	6562 ft above sea level
Degree of contamination	2	
Protection class (IEC 60529)	IP 40	
Protection class (IEC 60529), front	IP 41	
Protection class (UL 50E)	Type 1	
Protection class (UL 50E), front	Type 2	
Relative humidity	30-85 %, non-condensing	
Prevent condensation or contamination from dust or liquids		
Electrical data		
Nominal voltage	24 VDC	
Controller output	5 W	
Power supply via	VACUU·BUS	
Device fuse on circuit board	Nano fuse 4 A/t	
Interfaces		
Plug-in connector	VACUU·BUS	
Ethernet (LAN)	Patch cable min. cat. 5e RJ45	
USB port (1.0–2.0)	2x USB-A 2.0, max. 0.5 A per port	
Connections		
VACUU·SELECT Sensor	Small flange KF DN 16 Hose nozzle DN 6/10 PTFE hose DN 8/10	
Venting valve, optional	Silicone tube DN 4/6	

Weights		(US)
Controller with sensor	745 g	1.64 lb
Controller without sensor	590 g	1.3 lb
Plug-in power supply	250 g	0.55 lb

Dimensions (mm)

Dimensions





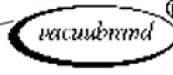
9.1.2 Rating plate



- ⇒ In the event of an error, make a note of the type and serial number on the rating plate.
- ⇒ When contacting our Service Department, please provide the type and serial number from the rating plate. This will allow us to provide you with specific support and advice for your device.

VACUU·SELECT rating plate, general

Data on rating plate

Manufacturer	—	VACUUBRAND GMBH + CO KG
Type/year/month of manufacture	—	VACUU·SELECT 20 / /
Serial number	—	SN—Select:
Option: Authorization, identification, symbols	—	SN
Supply voltage	—	24 V  75 W
Data matrix code	—	VACUU·BUS® 
VACUU·BUS-compatible	—	 Alfred—Zippe—Str. 4
Address	—	97877 Wertheim Made in Germany

9.1.3 VACUU-SELECT Sensor (optional)


Wetted materials

Wetted materials

Component	Wetted materials
Sensor	Aluminum oxide ceramic, gold-coated (if applicable)
Measurement chamber	PPS
Small flange	PP
Sealing ring at the sensor	Chemically resistant fluoroelastomer
O-ring inside small flange	FKM
Hose nozzle	PP
Venting valve seal	FFKM
Optional: blind plugs without venting valve	Epoxy resin

Vacuum data

Vacuum data

Values	(US)	
Measuring range (absolute)	1060–0.1 mbar	795–0.1 Torr
Accuracy of measurement	±1 mbar/hPa/Torr, ±1 digit, with VACUU-SELECT vacuum controller (after adjustment, constant temperature)	
Measuring principle	Ceramic diaphragm (aluminum oxide, gold-coated), capacitive, gas type independent, absolute pressure	
Temperature coefficient	< ±0.15 mbar (hPa)/K	< ±0.11 Torr/K
Maximum admissible pressure, abs.	1.5 bar	1125 Torr
Maximum admissible media temperature (gas), non-explosive atmosphere:		
Short term (< 5 min)	80 °C	176 °F
Continuous operation	45 °C	113 °F
ATEX approval if the ATEX marking is shown on the rating plate	II 3/- G Ex h IIC T4 Gc X Internal Atm. only	
Inner part (pumped gases)	Tech.File: VAC-EX02	
Maximum admissible media temperature (gas)  atmosphere:		
Short term	40 °C	104 °F
Continuous operation	40 °C	104 °F