L600R01V2
Mega Series

Service carts for large and extra large gas compartments

The L600 service carts for liquid gas storage have been developed to recover, purify, evacuate, fill, and vent large to extra-large SF_6 gas compartments with high process reliability. Modern control technology in conjunction with a user-friendly interface in several languages make device operation simple and convenient. Operation via mobile devices such as smartphones, tablets or laptops is available as an option. The external cover of the device protects the integrated components and considerably reduces noise. This series offers fully automated operation via a 10" touch screen with protective cover shielding from sunlight and dust. The swivelling touch screen allows ergonomic working at the optimum working height. For data exchange additional USB and Ethernet connections are integrated. By using the hermetically gastight DILO couplings and connections, emission-free gas handling is guaranteed. The series also enables short gas recovery and evacuating times thanks to the existing DN20 / DN40 couplings and is available with a second DN20 connecting coupling as an option. Thus, two functions can be carried out simultaneously. This makes it possible to evacuate air from one gas compartment and at the same time fill another gas compartment with SF_6 gas or to recover the gas from it. Thanks to the automated special functions the devices can be easily maintained without emissions.

The actual product may differ slightly from the image.

Standard version

- B200R.. oilfree DILO compressor (60 m³/h [at 50/60 Hz], 50 bar)
- oilfree suction pump for recovery of SF_6 (85m^3/h [at 50 Hz]; 105 m^3/h [at 60 Hz], final vacuum 1 mbar)
- vacuum pump for evacuation of air; delivery rate (configurable)
- evaporator (max. flow rate 200 kg/h)
- dry filter (water absorption capacity: 175 g at a dew point of -36°C)
- particle filter 1 µm
- operation and indication of the important process parameters via 10“ touch screen with protective cover
- indication units in bar / mbar, kPa or psi / torr to be selected on the touch screen
- with automatic switch-off function (SF_6 gas recovery, evacuation of air, filling of SF_6) when reaching the corresponding final values
- forklift slots
- crane eyelets
- fixing and steerable rollers with transport protection (configurable)
- drawer for tools and accessories
- 5 m long storage connecting hose DN8 with DILO coupling tongue part DN20
- most common global cylinder connections
- digital weighing scales for SF_6 cylinders (with automatic switch-off function), 0 - 120 kg with tare function, accuracy ± 0.02 %
- wrenches for DILO couplings and filters
- paint: anthracite-orange

Special features

- Gas type: SF_6
- Gas recovery: < 1 mbar
- Filling of gas: 0 - 10 bar
- Evacuation of air: < 1 mbar
- Maximum storage pressure: 50 bar
- Recommended gas quantity: < 600 kg
- Operation: automatic
- DILO couplings: DN20/DN40

Advantages & functions

- SF_6 gas recovery down to 1 mbar
- optional remote control via mobile devices
- automatic reversing contactor to correct the direction of rotation
- integrated special functions for easy maintenance and safe transport
- all versions are available with pressure vessels (integratable features) with CE marking or optionally with SQL or ASME approval
- the service carts can also be mounted onto a trailer

Technical data

Dimensions (W x H x D)	1,500 x 1,550 x 2,600 mm - Standard version
Weight	1,600 kg above mentioned version
Dimensions (W x H x D)	1,500 x 2,290 x 2,875 mm - Version: 300 l pressure vessel, with electronic weight indication, chassis with solid tyre wheels
Weight	2,300 kg above mentioned version
Dimensions (W x H x D)	1,500 x 2,290 x 2,875 mm - Version: 600 l pressure vessel, with electronic weight indication, chassis with solid tyre wheels
Weight	2,600 kg above mentioned version
Ambient temperature	0 to +45 °C
Operating temperature	0 to +45 °C
Storage temperature	-20 to +60 °C
Protection class	IP54
Sound level	83 dB
Maximum delivery capacity compressor	71 m3/h at suction pressure with SF_6 and a back pressure of 24 bar (50/60 Hz, with frequency converter)
Medium delivery capacity compressor	60 m3/h at suction pressure with SF_6 and a back pressure of 50 bar (50/60 Hz)

Configuration

Screen	
10" touch screen	Operation of the device and indication of the process parameters via 10" colour touch screen
10" touch screen + WiFi	10" colour touch screen with WiFi function for remote control
10" touch screen+WiFi+Cosy NA	10" colour touch screen with WiFi function for remote control and Cosy 4G router for remote access to the DILO device
10" touch screen+WiFi+Cosy EU	10" colour touch screen with WiFi function for remote control and Cosy 4G router for remote access to the DILO device
Operating voltage range	
208-240V 60Hz	208 - 240 V / 60 Hz, three-phase current
380-460V 50Hz	380 - 460 V / 50 Hz, three-phase current
380-480V 60Hz	380 - 480 V / 60 Hz, three-phase current
200V 50Hz	200 V / 50 Hz, three-phase current
200V 60Hz	200 V / 60 Hz, three-phase current
208-240V 50Hz	208 - 240 V / 50 Hz, three-phase current
600V 60Hz	600 V / 60 Hz, three-phase current
208-240V 60Hz (USA)	208 - 240 V / 60 Hz, three-phase current
480V 60Hz (USA)	480 V / 60 Hz, three-phase current
Vacuum pump	
Without vacuum pump - (VPA)	
63m³/h; <1mbar (VPB)	Vacuum pump for evacuation of air (63 m³/h at 50 Hz, 76 m³/h at 60 Hz, final vacuum < 1 mbar)
63m³/h; <1mbar (VPC)	Vacuum pump for evacuation of air (63 m³/h at 50 Hz, 76 m³/h at 60 Hz, final vacuum < 1 mbar)
63m³/h; <1mbar (VPD)	Vacuum pump for evacuation of air (63 m³/h at 50 Hz, 76 m³/h at 60 Hz, final vacuum < 1 mbar)
100m³/h; <1mbar (VPE)	Vacuum pump for evacuation of air (100 m³/h at 50 Hz, 120 m³/h at 60 Hz, final vacuum < 1 mbar)
100m³/h; <1mbar (VPF)	Vacuum pump for evacuation of air (100 m³/h at 50 Hz, 120 m³/h at 60 Hz, final vacuum < 1 mbar)
100m³/h; <1mbar (VPG)	Vacuum pump for evacuation of air (100 m³/h at 50 Hz, 120 m³/h at 60 Hz, final vacuum < 1 mbar)
200m³/h; <1mbar (VPH)	Vacuum pump for evacuation of air (200 m³/h at 50 Hz, 240 m³/h at 60 Hz, final vacuum < 1 mbar)
200m³/h; <1mbar (VPJ)	Vacuum pump for evacuation of air (200 m³/h at 50 Hz, 240 m³/h at 60 Hz, final vacuum < 1 mbar)
55m³/h; 2-stage (VPK)	Vacuum pump for evacuation of air, two-stage vacuum pump with exhaust filter, type RH0060, nominal suction capacity: 55 m³/h at 50 Hz, 65 m³/h at 60 Hz, final vacuum 0.0067 mbar
55m³/h; 2-stage (VPL)	Vacuum pump for evacuation of air, two-stage vacuum pump with exhaust filter, type RH0060, nominal suction capacity: 55 m³/h at 50 Hz, 65 m³/h at 60 Hz, final vacuum 0.0067 mbar
80m³/h; 2-stage (VPM)	Vacuum pump for evacuation of air, two-stage vacuum pump with exhaust filter, type RH0090, nominal suction capacity: 80 m³/h at 50 Hz, 95 m³/h at 60 Hz, final vacuum 0.0067 mbar

80m³/h; 2-stage (VPN)	Vacuum pump for evacuation of air, two-stage vacuum pump with exhaust filter, type RH0090, nominal suction capacity: 80 m³/h at 50 Hz, 95 m³/h at 60 Hz, final vacuum 0.0067 mbar
200m³/h+525m³/h (VPO)	Vacuum pump for evacuation of air, 2-stage consisting of 200 m³/h vacuum pump with nominal suction capacity of 200 m³/h at 50 Hz and 240 m³/h at 60 Hz and 500 m³/h Roots pump with nominal suction capacity of 500 m³/h at 50 Hz and 600 m³/h at 60 Hz, final vacuum 0.02 mbar.
200m³/h+525m³/h (VPP)	Vacuum pump for evacuation of air, 2-stage consisting of 200 m³/h vacuum pump with nominal suction capacity of 200 m³/h at 50 Hz and 240 m³/h at 60 Hz and 500 m³/h Roots pump with nominal suction capacity of 500 m³/h at 50 Hz and 600 m³/h at 60 Hz, final vacuum 0.02 mbar.
200m³/h+260m³/h (VPQ)	Vacuum pump for evacuation of air, 2-stage consisting of 200 m³/h vacuum pump with nominal suction capacity of 200 m³/h at 50 Hz and 240 m³/h at 60 Hz and 260 m³/h Roots pump with nominal suction capacity of 260 m³/h at 50 Hz and 300 m³/h at 60 Hz, final vacuum 0.02 mbar.
200m³/h+260m³/h (VPR)	Vacuum pump for evacuation of air, 2-stage consisting of 200 m³/h vacuum pump with nominal suction capacity of 200 m³/h at 50 Hz and 240 m³/h at 60 Hz and 260 m³/h Roots pump with nominal suction capacity of 260 m³/h at 50 Hz and 300 m³/h at 60 Hz, final vacuum 0.02 mbar.
Exhaust monitoring	
without K203R01X monitoring	Without exhaust monitoring system for vacuum pump (additional SF_6 sensor on the vacuum pump, which automatically terminates the function in the event of SF_6 detection during the evacuation of air / nitrogen, thus preventing unintentional gas loss).
with K203R01X monitoring	With exhaust monitoring system for vacuum pump (additional SF_6 sensor on the vacuum pump, which automatically terminates the function in the event of SF_6 detection during the evacuation of air / nitrogen, thus preventing unintentional gas loss).
Filling pressure + emptying of storage vessel	
K205R01 (10 bar) with K204R07	Filling of gas compartment with SF_6 up to max. pa 10 bar. The storage vessel connected for filling (cylinder, internal / external pressure vessel) can be recovered down to atmospheric pressure.
K205R02 (15 bar) with K204R07	Filling of gas compartment with SF_6 up to max. pa 15 bar. The storage vessel connected for filling (cylinder, internal / external pressure vessel) can be recovered down to atmospheric pressure.
K205R01 (10 bar) with K204R08	Filling of gas compartment with SF_6 up to max. pa 10 bar. The storage vessel connected for filling (cylinder, internal / external pressure vessel) can be recovered down to < 1 mbar.
K205R02 (15 bar) with K204R08	Filling of gas compartment with SF_6 up to max. pa 15 bar. The storage vessel connected for filling (cylinder, internal / external pressure vessel) can be recovered down to < 1 mbar.
Device covering	
standard sheet-metal cover	With sheet metal cover for the complete device
with tarpaulin	With tarpaulin
Integrateable features (pressure vessel, chassis and rollers)	
Without rollers	
steerable and fixing rollers	

chassis with solid tyre wheels	Chassis with solid tyre wheels, diameter 400 mm
300l / 50bar CE / chassis	300 l / 50 bar pressure vessel in accordance with Directive 2014/68/EU and CE marked with electronic weight indication and chassis with solid tyre wheels
600l / 50bar CE / chassis	600 l / 50 bar pressure vessel in accordance with Directive 2014/68/EU and CE marked with electronic weight indication and chassis with solid tyre wheels
300l / 50bar SQL;CN / chassis	300 l / 50 bar pressure vessel with SQL approval, electronic weight indication and chassis with solid tyre wheels
600l / 50bar SQL;CN / chassis	600 l / 50 bar pressure vessel with SQL approval, electronic weight indication and chassis with solid tyre wheels
300l / 50bar ASME / chassis	300 l / 50 bar pressure vessel with ASME approval, electronic weight indication and chassis with solid tyre wheels
600l / 50bar ASME / chassis	600 l / 50 bar pressure vessel with ASME approval, electronic weight indication and chassis with solid tyre wheels
300l / 50bar SQL;GE / chassis	300 l / 50 bar pressure vessel with SQL approval (Made in Germany), electronic weight indication and chassis with solid tyre wheels
600l / 50bar SQL;GE / chassis	600 l / 50 bar pressure vessel with SQL approval (Made in Germany), electronic weight indication and chassis with solid tyre wheels
Dew point control + parallel operation	
w/o dew point, w/o parallel	Without SF_6 dew point control downstream from the dry filter, without additional coupling DN20 for simultaneous evacuation of air and gas recovery or filling of SF_6.
w. dew point, w/o parallel	With SF_6 dew point control downstream from the dry filter, without additional coupling DN20 for simultaneous evacuation of air and gas recovery or filling of SF_6.
w/o dew point, w. parallel	Without SF_6 dew point control downstream from the dry filter, with additional coupling DN20 for simultaneous evacuation of air and gas recovery or filling of SF_6.
w. dew point, w. parallel	With SF_6 dew point control downstream from the dry filter, with additional coupling DN20 for simultaneous evacuation of air and gas recovery or filling of SF_6.
Filter / Evaporator	
1x filter; 1x evaporator	1x filter and 1x evaporator included as a standard. Without extension to additional filter or evaporator.
2x filters; 1x evaporator	1x filter and 1x vaporiser included as a standard. Extension to 1x additional filter for higher performance.
1x filter; 2x evaporators	1x filter and 1x vaporiser included as a standard. Extension to 1x additional evaporator for higher performance.
2x filters; 2x evaporators	1x filter and 1x vaporiser included as a standard. Extension to 1x additional filter and 1x additional evaporator for higher performance.
Vacuum indication	
Standard indication	0 - 100 mbar, resolution 0.1 mbar
High-precision indication A	High-precision vacuum sensor for gas compartment A, indicating range 1x10-5 mbar
High-precision indication B	High-precision vacuum sensor for gas compartment B, indicating range 1x10-5 mbar
High-precision indication A+B	High-precision vacuum sensor for gas compartment A and gas compartment B, indicating range 1x10-5 mbar

Optional accessories

6-1017-R050	5 m long rubber hose DN20 with DILO coupling tongue part DN20 on both ends
6-1017-R070	7 m long rubber hose DN20 with DILO-coupling tongue part DN20 on both ends
6-1017-R100	10 m long rubber hose DN20 with DILO coupling tongue part DN20 on both ends
6-1365-R050	5 m long wire braided hose DN20 with DILO coupling tongue part on both ends PN 64 bar
6-1365-R100	10 m long wire-braided hose DN20 with DILO coupling tongue part on both ends PN 64 bar
6-1076-R050	5 m long wire-braided hose DN40 with DILO-coupling tongue part DN40 on both ends PN16
6-1076-R100	10 m long wire-braided hose DN40 with DILO-coupling tongue part DN40 on both ends
6-1080-R050	5 m long wire-braided hose DN40 with DILO coupling tongue part DN40 on one end and DILO coupling tongue part DN20 on the other end
6-1080-R100	10 m long wire-braided hose DN40 with DILO coupling tongue part DN40 on one end and DILO coupling tongue part DN20 on the other end
6-1235-R001	DILO coupling tongue part DN40 with transition piece to 2 x DN20, 2 rubber hoses DN20 (10 m long) with DILO coupling tongue part DN2
6-1048-R531	Annual maintenance package for L400R01V2 + L600R01V2 with standard vacuum pump (63 m^3/h) / (100 m^3)
6-1048-R532	Annual maintenance package for L400R01V2 + L600R01V2 with vacuum pump (200 m^3/h)
6-1048-R535	Annual maintenance package for L400R01V2 + L600R01V2 with two-stage vacuum pump (RH0060)
6-1048-R536	Annual maintenance package for L400R01V2 + L600R01V2 with two-stage vacuum pump (RH0090)
6-1341-R111	Spare parts kit (valves and piston rings) for compressor
6-1101-R161	Spare parts kit (SF_6 dry filter and particle filter)
6-1053-R004/1M	Electrical connecting cable 5x16 AWG5 (available lengths 5 - 30 m)
6-1053-R008/1M	Electrical connecting cable 5x35 AWG1 (available lengths 5 - 30 m)

Packaging

3-761-R151-C	Packing for L400R01V2 + L600R01V2
3-761-R152-C	Packing for L400R01V2 + L600R01V2 with chassis (as option)
3-761-R153-C	Packing for L400R01V2 + L600R01V2 with pressure tank
3-761-R154-C	Packing for L400R01V2 + L600R01V2 without rollers

Note

For the 380 - 480 V voltage range the following cable is required: 6-1053-R004

For the 208 - 240 V voltage range the following cable is required: 6-1053-R008