

B143R11V4
Mini Series

Service carts for small gas compartments

The service carts of the Mini Series for liquid gas storage meet all requirements for efficient gas handling in the medium voltage range and thus, allow gas recovery down to 5 mbar. Equipped with the well-proven DILO components these service carts enable the recovery, filling and purification of SF₆ gas as well as the evacuation of small gas compartments. This series offers semi-automatic operation via a 7" touch screen.

Equipped with four solid tyred wheels, the devices can be conveniently moved on uneven and gravel ground.



Standard version

- oil-free DILO compressor (1.6 m³/h [at 50 Hz], 50 bar; 1.9 m³/h [at 60 Hz], 50 bar)
- oil-free vacuum compressor for SF₆ gas recovery (3.3 m³/h, final vacuum 5mbar)
- vacuum pump for evacuation of air (16 m³/h [bei 50 Hz]; 19 m³/h [bei 60 Hz])
- dry filter (water absorption capacity: 60 g at a dew point of -36 °C)
- particle filter 1 µm
- pressure reducer 0 - 16 bar
- operation and indication of the important process parameters via 7" touch screen
- crane eyelets
- indication units in bar / mbar, kPa or psi / torr to be selected on the touch screen
- fixing and steerable rollers
- 3 m long electrical connecting cable
- digital weighing scales for SF₆ cylinders (with automatic switch-off function), 0 - 120 kg with tare function, accuracy ± 20 g
- paint: anthracite-orange

Special features

- Gas type: SF₆
- Gas recovery: < 5 mbar
- Filling of gas: 0 - 16 bar
- Evacuation of air: < 1 mbar
- Maximum storage pressure: 50 bar
- Recommended gas quantity: < 40 kg
- Operation: semi-automatic
- DILLO couplings: DN20

Advantages & functions

- SF₆ gas recovery down to 5 mbar
- integrated special functions for easy maintenance and safe transport
- stowage tray for accessories

Technical data

Dimensions (W x H x D)	750 x 1350 x 730 mm
Weight	192 kg (without storage cylinder and transformer)
Operating voltage	220 - 240 V
Frequency	50 - 60 Hz AC
Operating voltage	110 - 127 V (variant with transformer 3-829-R010)
Frequency	50 - 60 Hz
Ambient temperature	0 to +45 °C
Operating temperature	0 to +45 °C
Storage temperature	-20 to +60 °C
Sound level	< 70 dB
Protection class	IP54
Maximum delivery capacity compressor	11 m ³ /h at suction pressure with SF ₆ and a back pressure of 50 bar (50Hz)
Maximum delivery capacity compressor	11,6 m ³ /h at suction pressure with SF ₆ and a back pressure of 21 bar (60Hz)
Medium delivery capacity compressor	1,6 m ³ /h at suction pressure with SF ₆ and a back pressure of 50 bar (50Hz)
Medium delivery capacity compressor	1,9 m ³ /h at suction pressure with SF ₆ and a back pressure of 25 bar (60Hz)

Configuration

Screen	
7" touch panel	Operation of the device and indication of the process parameters via 7" colour touch panel
7" touch panel + WLAN	
7" touch panel+WLAN+Cosy NA	
7" touch panel+WLAN+Cosy EU	
Operating voltage range	
220-240V 50/60Hz	220 - 240 V 50 / 60 Hz,
110-127V 50/60Hz USA	110-127V 50/60Hz , special voltage
Device covering	
without device covering	
tarpaulin for type	
Automatic control + exhaust monitoring	
without K141R31 and K203R01	Without automatic switch off function (evacuation of air, filling of SF ₆ , recovery of SF ₆) when reaching the corresponding final values Without exhaust monitoring for vacuum pump (additional SF ₆ sensor at the vacuum pump which terminates the function "Evacuation of air / N ₂ " automatically when detecting SF ₆ gas in the exhaust air for avoiding an inadvertent loss of SF ₆ gas)
with K141R31; without K203R01	With automatic switch off function (evacuation of air, filling of SF ₆ , recovery of SF ₆) when reaching the corresponding final values Without exhaust monitoring for vacuum pump (additional SF ₆ sensor at the vacuum pump which terminates the function "Evacuation of air / N ₂ " automatically when detecting SF ₆ gas in the exhaust air for avoiding an inadvertent loss of SF ₆ gas)
without K141R31; with K203R01	Without automatic switch off function (evacuation of air, filling of SF ₆ , recovery of SF ₆) when reaching the corresponding final values With exhaust monitoring for vacuum pump (additional SF ₆ sensor at the vacuum pump which terminates the function "Evacuation of air / N ₂ " automatically when detecting SF ₆ gas in the exhaust air for avoiding an inadvertent loss of SF ₆ gas)
with K141R31; with K203R01	With automatic switch off function (evacuation of air, filling of SF ₆ , recovery of SF ₆) when reaching the corresponding final values With exhaust monitoring for vacuum pump (additional SF ₆ sensor at the vacuum pump which terminates the function "Evacuation of air / N ₂ " automatically when detecting SF ₆ gas in the exhaust air for avoiding an inadvertent loss of SF ₆ gas)
Emptying of storage vessel	
without K204R06	The for the filling process connected gas container (bottle, internal / external storage tank) can be emptied down to atmospheric pressure
with K204R06	The for the filling process connected gas container (bottle, internal / external storage tank) can be emptied down to < 5 mbar
Dew point control	
without K129R13	Without dew point control for dry filter
with K129R13	With dew point control for dry filter

Optional accessories

6-1138-R050	5 m long DN8 rubber hose, DN8 coupling tongue part on one end and DN20 coupling tongue part on the other end
6-1120-R050	5 m long DN20 rubber hose, DN8 coupling tongue part on one end and DN20 coupling tongue part on the other end
6-1017-R050	5 m long rubber hose DN20 with DILO coupling tongue part DN20 on both ends
6-1173-R050	5 m long DN8 wire-braided hose, DN8 coupling tongue part on one end and DN20 coupling tongue part on the other end
6-1359-R050	5 m long DN20 wire-braided hose, DN8 coupling tongue part on one end and DN20 coupling tongue part on the other end PN 40 bar
6-1365-R050	5 m long wire braided hose DN20 with DILO coupling tongue part on both ends PN 64 bar
6-1400-R020	2 m long DN4 PTFE storage connecting hose, DN8 DILO couplings, DN8 ball valve with hand wheel and SF ₆ cylinder connection W21,8 x 1/14"
6-1206-R001	Transition piece DN20 / DN8
6-1281-R001	Coupling DN20 for venting a recovered gas compartment with air
6-1281-R002	Coupling DN8 for venting a recovered gas compartment with air
05-1144-R002	20 l Gas cylinder for new SF ₆ gas
3-334-R002 P	American SF ₆ cylinder connection 0.960"-14NGO-LH-EXT - CGA 590
3-245-R004 P	English SF ₆ cylinder connection G 5/8 - BS No. 3
3-643-R002 P	Chinese SF ₆ cylinder connection with G 5/8 thread - DIN 477 No. 7
3-851-R002 P	Connection for reuse gas bottle 1" - DIN 477 No. 8
K029R71	Tarpaulin
6-1048-R203	Annual maintenance package for SF ₆ dry filter, particle filter and vacuum pump (16 m ³ /h)
6-1081-R010	Spare parts kit for compressor
05-1489-R200	Spare parts kit for vacuum compressor
6-1101-R101	Spare part kit (SF ₆ dry and particle filter)
3-316-R001 P	Cylinder connection SF ₆ with thread W 21,8 x 1/14" - DIN 477 Nr. 6
6-1041-R020	Storage connection hose DN8, 2 meter long with coupling tongue part DN8 on both ends + most common global cylinder connections
6-1041-R050	Storage connection hose DN8, 5 meter long with coupling tongue part DN8 on both ends + most common global cylinder connections
B077R20	Mini Series pre-filter unit (p _e 50 bar)

Packaging

3-262-R009-C	Packing for B143R11V4
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