

## KV Screw Compressor Units with Diesel Engine

### Economy, unpretentiousness, reliability!

KV compressor units with a capacity from 88,29 up to 1059,44 CFM (from 2,5 up to 30 m<sup>3</sup>/min), working pressure from 87 up to 435,1 psig (from 6 up to 30 bar) are designed for the compressed air supply to the equipment used in the territories with limited or absent power supply and for the operation in adverse climatic conditions up to -31°F (-35°C) with the additional equipment being installed.

KV compressor units with diesel engine are low-noise units with a screw compressor, mounted on an own frame in a soundproof cabinet with no need to have a special foundation.

The units are manufactured on the basis of Yamz, MMZ, Deutz German screw air ends.

Compressors KV have all-weather, powder-painted housing which protects against corrosion throughout compressor lifetime.

In their standard version the units are designed for operation at the climatic implementation category No.1 according to GOST 15150-69 and at the ambient temperature from 32 °F up to 104 °F (from 0°C up to +40°C). If the unit is equipped with a prestart heater the range of the working temperature is from -31°F up to 104 °F (from -35°C up to 40°C).

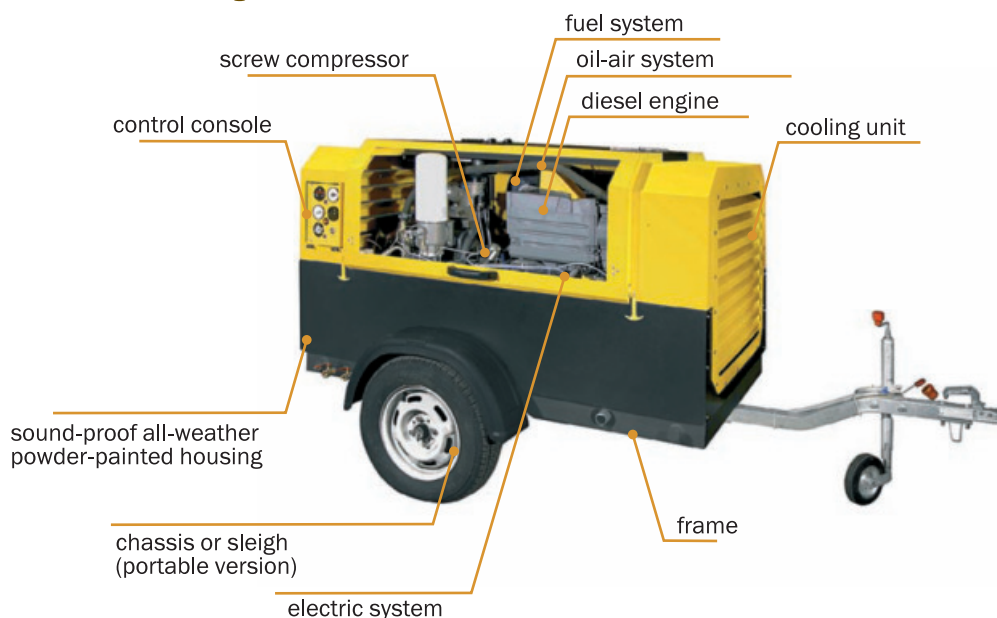
KV compressor units can be whether stationary or mobile.

The operation life of the screw compressor is 40000 hours at the average.



**The KV compressor unit  
warranty period is 1 year**

### The basic elements of design



KV compressor units are equipped with a continuous efficiency control, that guarantee a reliable and economical operation.

KV compressor units can be additionally equipped with a wide range of components (optional).

## KV Screw Compressor Units



### Compressor units KV-3/8, KV-5/10, KV-6/7

These compressors are intended for providing operation of three pneumatic hammers, one perforator or other pneumatic tools. Due to light weight they can be transported with a car (for versions on chassis) or in a small truck body (stationary version).



### Compressor units KV-10/16 and KV-12/12

These compressors are applied for pipeline pressure tests, fiber-optic communication lines laying, compressed air supply for special sandblasters.



### Compressor units KV-8/8, KV-10/8, KV-12/10

These compressors are developed to perform the works which need simultaneous connection with up to 10 pick hammers. These units are designed to conduct continuous operation with high-capacity sandblasters and concrete pumps.



### Compressor units KV-25/10, KV-20/16, KV-20/25, KV-25/16 and KV-30/10

These compressors do not have any analogs produced in Russia and CIS. These are high-capacity compressors, which are applied for sandblasting, drilling-and-blasting, pipelines tests, fiber-optic communication lines laying, etc.

#### Technical characteristics

Model	Delivery cfm (m <sup>3</sup> /min)	Rated Operating Pressure, psig (barg)	Drive power HP (kW)	Dimensions, LxWxH in (mm)	Weight lb (kg)
KV-3/8	88,29 (2,5)	116,0-174,0 (8-12)	32,4 (24,2)	67,6x44,0x49,1 (1718x1118x1247)	1543,2 (700)
KV-3/8M	88,29 (2,5)	116,0-174,0 (8-12)	32,4 (24,2)	121,5x61,5x49,1 (3086x1561x1247)	1653,5 (750)
KV-5/10	176,57 (5,0)	145,0 (10)	48,0 (35,8)	76,2x51,0x49,0 (1936x1295x1245)	1653,5 (750)
KV-5/10M	176,57 (5,0)	145,0 (10)	48,0 (35,8)	126,0x61,4x58,2 (3200x1560x1478)	1763,7 (800)
KV-6/7	211,89 (6,0)	101,5 (7)	48,0 (35,8)	76,2x51,0x49,0 (1936x1295x1245)	1763,7 (800)
KV-6/7P	211,89 (6,0)	101,5 (7)	48,0 (35,8)	126,0x61,4x58,2 (3200x1560x1478)	1763,7 (800)
KV-8/8	282,52 (8,0)	116,0 (8)	79,9 (59,6)	114,2x52,0x67,2 (2900x1320x1705)	3306,9 (1500)
KV-8/8M	282,52 (8,0)	116,0 (8)	79,9 (59,6)	156,3x72,4x79,4 (3970x1840x2015)	3527,4 (1600)
KV-10/16	353,15 (10,0)	232,0 (16)	177,0 (132)	121,9x62,1x64,2 (3095x1577x1630)	5401,3 (2450)
KV-10/16	353,15 (10,0)	232,0 (16)	177,0 (132)	171,3x74,8x74,8 (4350x1900x1900)	5732,0 (2600)
KV-10/8	353,15 (10,0)	116,0 (8)	107,3 (80)	114,2x52,0x66,1 (2900x1320x1680)	3306,9 (1500)
KV-10/8M	353,15 (10,0)	116,0 (8)	107,3 (80)	149,2x72,4x74,4 (3790x1840x1890)	3527,4 (1600)
KV-12/12	423,78 (12,0)	174,0 (12)	177,0 (132)	121,9x62,1x64,2 (3095x1577x1630)	5401,3 (2450)
KV-12/10	423,78 (12,0)	145,0 (10)	138,1 (103)	114,2x52,0x66,1 (2900x1320x1680)	3306,9 (1500)
KV-12/12 (Cummins)	423,78 (12,0)	174,0 (12)	177,0 (132) Cummins 6BTA5,9-C180	102,6x48,7x95,9 (2605x1237x2435)	3306,9 (1500)
KV-12/12M	423,78 (12,0)	174,0 (12)	177,0 (132)	171,3x74,8x74,8 (4350x1900x1900)	5732,0 (2600)
KV-12/10M	423,78 (12,0)	145,0 (10)	138,1 (103)	149,2x72,4x74,4 (3790x1840x1890)	3527,4 (1600)
KV-20/30	706,29 (20,0)	435,1 (30)	394,2 (294)	162,2x79,9x92,1 (4120x2030x2340)	9920,8 (4500)
KV-20/30M	706,29 (20,0)	435,1 (30)	394,2 (294)	237,4x79,9x95,9 (6030x2030x2435)	10582,2 (4800)
KV-20/25	706,29 (20,0)	362,6 (25)	325,8 (243)	162,2x79,9x92,1 (4120x2030x2340)	9920,8 (4500)
KV-20/25M	706,29 (20,0)	362,6 (25)	325,8 (243)	237,4x79,9x95,9 (6030x2030x2435)	10582,2 (4800)
KV-25/16	882,87 (25,0)	232,0 (16)	325,8 (243)	162,2x79,9x92,1 (4120x2030x2340)	9920,8 (4500)
KV-25/16M	882,87 (25,0)	232,0 (16)	325,8 (243)	237,4x79,9x95,9 (6030x2030x2435)	10582,2 (4800)
KV-30/10	1059,44 (30,0)	145,0 (10)	325,8 (243)	162,2x79,9x92,1 (4120x2030x2340)	9920,8 (4500)
KV-30/10M	1059,44 (30,0)	145,0 (10)	325,8 (243)	237,4x79,9x95,9 (6030x2030x2435)	10582,2 (4800)

M - mobile

## KV Screw Compressor Units

### Compressor KV-20/25

Taking into account up-to-date market demand in 2009 «ChKZ» CJSC developed and launched production of the unique screw compressors KV-20/25 (KV-20/25P - on a chassis).



Compressors KV-20/25 are equipped with efficiency control system from 0 to 100%. It is controlled with the VMC intake valve (Italy), which is sensitive to working pressure changes in the receiver-oil separator. The working pressure can be regulated in the range 7,3 – 362,6 psig (5-25 bar).

Compressors KV-20/25 can easily replace the expensive import analogs, as they were developed with due regard to the units KV-20/16 and KV-25/10 production and operation practice. These units have given a good account of themselves both in Russian southern and northern regions, where oil fields, gas fields and diamonds deposits (JSC Alrosa) are developed.

**Table of available options**

Options	KV-3/8 Deutz F03 M2011	KV-5/10 Deutz F03 L2011	KV-6/7 Deutz F03 L2011	KV-8/8 D-243	KV-10/16 YamZ-236M2	KV-10/8 D-245	KV-12/10 DeutzBF04M2012C	KV-12/12 YamZ-236M2	KV-20/25 KV-25/16 KV-30/10 YamZ-238D	KV-20/30 YamZ-35-7511 (294)
After cooler	-	ST	ST	+	-	+	-	-	-	-
Moisture separator	-	+	+	+	+	+	+	+	+	+
Lubricator	+	+	+	+	+	+	+	+	-	-
Wheel chocks with fixation	+	+	+	+	+	+	+	+	+	+
Toolbox	-	-	-	+	+	+	+	+	+	+
Optical filter clogging indicator	ST	ST	ST	+	+	+	+	+	+	+
Antitheft chain with lock	+	+	+	+	+	+	+	+	+	+
Air treatment filter	+	+	+	+	+	+	+	+	+	+
Ball ring maunting	+/+	+/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+	-/+
Winter start-up package	+	+	+	+	+	+	+	+	+	+
Company color painting *	+	+	+	+	+	+	+	+	+	+
Air hose reel	+	+	+	+	+	+	+	+	+	+
Tool kit for compressor maintenance	+	+	+	+	+	+	+	+	+	+

Symbols in the table:

(+) – option available,

(-) – option unavailable,

ST – option included in standard configuration

\* - for orders minimum 10 pcs

## KV Screw Compressor Units

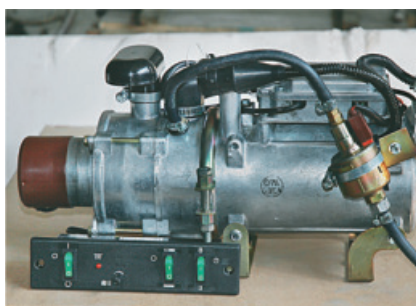
KV



### Options for Compressors KV

#### Additional DEUTZ fuel filter

Ensures water and solid particles removal from the fuel. Protects engine fuel system if diesel fuel is of low quality



#### «Winter package»

Prestating heater with timer warms coolant or heats crankcase that assures fail-safe start at the ambient temperature up to -31 °F (-35 °C).



#### Lubricator (Main oilier)

Pulverizes oil in the compressed air making oil mist which provides lubrication of instrument and prevents covering with ice. The intension of consumption is controlled by stopcock. The compressor capacity is enough for one shift of compressor work.

#### Toolbox

Double or single box for tools which is kept inside the closed compressor frame.

#### Antitheft chain

It is a solid alloy chain in polymeric cover with lock.

#### Compressed air treatment equipment

Upon customers' request the compressors KV can be equipped with the filters, which purifies the compressed air from the dust (up to 0,01 mm) and oil (up to 0,003 mg/m<sup>3</sup>). Adsorption air dryer (dew point -94 °F (-70°C)) can be installed nearby the compressor.