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BUILDING THE FUTURE

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KOMPRESSOREN

O nas

Hertz Kompressoren jest jedną z wiodących marek Dalgakiran Group Company od 2005 r.

Od ponad 50 lat Dalgakiran group projektuje i produkuje tłokowe i rotacyjne sprężarki śrubowe przy użyciu najnowocześniejszych i najbardziej intuicyjnych technik produkcji.

Obecnie produkty Hertz Compressoren są dobrze znane w ponad stu krajach dzięki swojej najwyższej niezawodności i jakości.

Hertz Kompressoren zawsze stara się tworzyć I wytwarzac produkty o najwyższej jakości ,aby zadowolić klientów na całym świecie I oferować swoim klientom kreatywne ,wyrafinowane I pragmatyczne rozwiązania dla wielu wyzwań.

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Building The Future

HRSC SERIES

TURBO SERIES

HSC SERIES

WAVE SERIES

FRECON
PLUS SERIES

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HGS SERIES

PET MASTER SERIES

HPC SERIES

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ROTARY SCREW AIR COMPRESSORS

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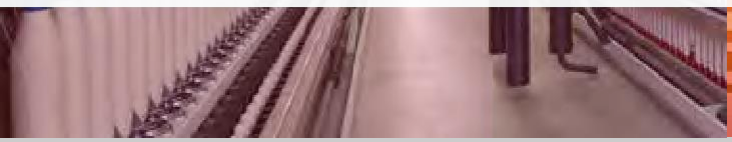
ROTARY SCREW AIR COMPRESSORS



STANDARD EQUIPMENT

High quality components such as IP55 electric motors with the IE3 efficiency class, IP54 fan motors, star-delta motor starter system, electrical materials selected according to IEC, UL/cUL, CE standards as per the market requirements, high-efficiency screw blocks consuming less energy are provided as standard in all our products.

SERVICEABILITY

Service-friendly design implemented using a layout that provides instant access to all consumable items, with quick-release protective covers and easy-to-use controllers minimizes downtime and reduces maintenance costs.

QUIET OPERATION

WITH THE R&D WORKS PERFORMED, SOUND LEVELS ARE REDUCED TO A LEVEL OF 69 dBA.

ELECTRONIC CONTROL

Hertz Kompressoren rotary screw compressors are equipped with easy-to-use, robust and long-lasting microprocessor controllers with communication capabilities as per the product line to ensure smooth operation and uninterrupted production.

SCREW BLOCK

- Patented and durable screw block that provides high-capacity of air, and that is specially selected for each model's capacity requirement
- Production of air with less loss of air, thanks to the new rotor profiles, and lower torque requirements
- New generation bearing design with increased load carrying capabilities

AIR OIL SEPARATOR

Spin-on or immersed type separator design depending on the product line

Immersed type separator
High performance separation with three-stage design
More efficient separation at lower volume with deeply wrapped, intertwined separation layers
Low amount of oil mist in outlet air ≤ 3 ppm

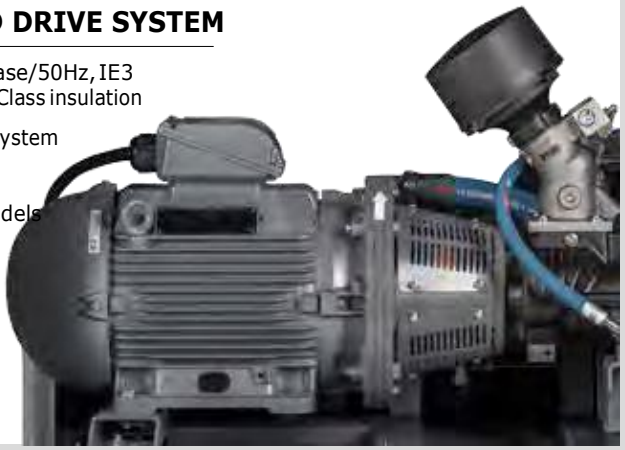
Spin-on separator
Easy replacement, ease of assembly and disassembly
Design that does not require a separator tank

MAIN MOTOR AND DRIVE SYSTEM

High efficiency 400V/3 phase/50Hz, IE3
IP55 electric motors with F Class insulation

Star delta motor starting system
Easy of assembly and disassembly with bush pulleys on belt-pulley models

On direct coupled models, long-lasting and efficient transfer system thanks to use of elastic couplings



Features specified in this section are standard for all machines except PA and RSC series.
Review the introduction pages specially prepared for each product line for additional features

AIR SUCTION SYSTEM

- Effective pre-filtering and clean compressor interior with glass fiber pre-filter/panel filter
- onLger servicing periods and up to 99% separation efficiency thanks to the suction air filter with high dust-collection capacity
- peAial suction valve (regulator) that provides less pressure loss and higher suction efficiency

COOLING SYSTEM

- lumAinum combo cooler with a long-life Bar / Plate system for cooling of pressurized air and oil ensures that the temperature of pressurized air flow is kept low
- ourF-/three-way thermostatic valve improves cooling performance
- ueQtand efficient axial fan
- emTperature-controlled fan motor

OTHER FEATURES

- emRovable acoustic canopy & rigid housing base
- ryDype air filter
- ullFflow oil filter
- lecEtropneumatic load/unload controlled suction valve
- inimum pressure valve
- ecManical and electronic safety systems
- resPsure relief valve and silencer
- ateW separator and automatic discharge system
- E Certified air and oil tanks complying with SPVD (Simple Pressure Vessel Directive) and designed as per EN 286-1 standard

Features specified in this section are standard for all machines except PA and RSC series.
Review the introduction pages specially prepared for each product line for additional features.

GENERAL OPTIONS

- ater W cooling system
- ealt H recovery system
- il h Oeater
- Soft-starter
- ain M motor with IE4 efficiency class
- se U of food grade oil
- ain M s voltage options other than 400V/3 phase/50Hz

CONTROLLERS

L 33-S

- uM-operation function up to 5 compressors without requiring an external main controller
- haTnksto the automatic motor bearing lubrication system, the motor is never lubricated too much, too little or too late. Thus, service life of motor bearings is maximized.
- eeWy scheduler with the ability to start and stop the machine at 3 different time periods, which can be set individually for each day of the week.
- bilAty to do both pressure and temperature PID at the same time thanks to the Dual PID feature.
- ithWhe pressure PID, it provides energy efficiency by keeping the pressure constant at the desired value.
- ithWhe temperature PID, it controls the speed of the fan motor to ensure that the screw block operates at the constant temperature, where it is most efficient.
- ll iAverter and compressor control data are managed from a single point in models with an inverter.
- ternal ModBus communication
- setUfriendly screen interface

L 26-S

- /SM(Master/Slave - Equal ageing) operation function without requiring an external main controller for 2 compressors
- haTnksto the automatic motor bearing lubrication system, the motor never lubricated too much, too little or too late. Thus, service life of motor bearings is maximized.
- eeWy scheduler with the ability to start and stop the machine at 3 different time periods, which can be set individually for each day of the week.
- ll iAverter and compressor control data are managed from a single point in models with an inverter
- ll iAverter and compressor control data are managed from a single point in models with an inverter.
- ternal ModBus communication
- setUfriendly screen interface

L-9

- /SM(Master/Slave - Equal ageing) operation function without requiring an external main controller for 2 compressors
- ternal ModBus communication
- setUfriendly screen interface

OUR DISTINGUISH SERVICES

Optimization of Energy Efficiency

Reducing energy costs and sustainability play a key role in optimizing industrial plants and operating them at an affordable cost.

Increasing energy prices and ever-challenging market conditions force all companies to review their energy consumption. The profitability of businesses is affected by the efficient use of energy resources.

We measure your installed systems on-site to reduce your energy costs, issue reports on your system in detail, and recommend the optimum solution for saving energy. From a to z, we offer professional services by providing consultancy for your compressed air installations, including elimination of losses and leaks.

This service is free of charge when you purchase a new compressor.

Compressor Replacement System

When you make a investment and/or require reduction or expanding in your operations, we measure your system, and report the results. Our evaluation will optimize your system to be the most efficient and economical.

Capacity measurement service is offered free of charge when you purchase new compressors.

Maintenance for Any Brand of Compressors

Regardless of its brand and model, we provide fast and professional Hertz service for any kind of compressors. We provide fast service, maintenance and fault repair support 24/7 using special original spare parts for every brand of compressors with our authorized service network throughout Turkey and the know-how of our regional directorates.

General Overhaul service for any brand and model compressors that have reached the overhaul period is provided by Hertz's Central Service.

*Warranty of 6 months for parts and 1 year for labour,
* Free of charge transportation within Istanbul,
* Free replacement machine support during the overhaul operation.

FRECON PLUS SERIES

Rotary Screw Air Compressors

HERTZ FRECON PLUS series variable-speed compressors drive the motor with the frequency converter to adjust the compressor operation speed according to your requirements and save up to 35% energy. Thanks to its high-quality equipment and excellent engineering in its design, it provides a very efficient and flexible use as per requirements. Responds to all requirements between 5.5 and 315 KW.

ADVANTAGES

- Up to 35% energy saving*
- Operation at constant output pressure value
- Wide operating pressure range (5-14 bars)
- Soft-sttarting
- Protection against the adverse effects of peak currents
- Effective production of pressurized air even in case of highly variable pressurized air requirements

*When compared with compressors without an inverter for business with variable requirements

MAIN MOTOR AND DRIVE SYSTEM

- Directly coupled one on one (1:1) with the elastic coupling
- Variable-speed starting with frequency converter
- High temperature protection with motor bearings (FRECON 55-315 Plus)

AIR/OIL SEPARATOR

- Easy-to-detach spin-on type separator (FRECON 5-37 Plus)
- High-efficiency immersion type separator with long service life (FRECON 45-315 Plus)

COOLING SYSTEM

- Temperature controlled fan (FRECON 5-30 Plus)
- Axial fans controlled with secondary fan inverter (FRECON 30-315 Plus)

OTHER FEATURES

- High temperature sensor for motor bearings (FRECON 55-315 plus)

ADDITIONAL OPTIONS TO THE GENERAL OPTIONS LIST

- Model options with Tank, without Tank, with Tank dryer (FRECON 5-15 Plus)

TECHNICAL DATA

MODEL	PRESSURE		CAPACITY				MOTOR POWER kW/HP	CONNECTION SIZE	DIMENSIONS mm			WEIGHT kg	NOISE dB(A)
	Bar	PSI	Minimum		Maximum				Width	Depth	Height		
			m³/min	SCFM	m³/min	SCFM							
FRECON 5 PLUS	7,5 10 13	110 145 190	0,38 0,37 0,36	11 10 14	1,03 0,83 0,64	32 27 23	5,5/7,5	1/2”	1025	650	950	235	69
FRECON 7 PLUS	7,5 10 13	110 145 190	0,42 0,43 0,43	14 13 12	1,40 1,20 0,95	42 35 29	7,5/10	1/2”	1025	650	950	255	70
FRECON 11 PLUS	7,5 10 13	110 145 190	0,77 0,81 0,74	27 29 16	1,80 1,61 1,30	64 57 46	11/15	3/4”	1175	730	1000	305	69
FRECON 15 PLUS	7,5 10 13	110 145 190	0,99 0,97 0,99	35 34 35	2,85 2,33 2,07	101 82 73	15/20	3/4”	1175	730	1000	345	71
FRECON 18 PLUS	7,5 10 13	110 145 190	1,10 1,00 1,10	37 36 38	3,50 3,00 2,60	124 106 92	18,5/25	1”	1275	850	1465	465	71
FRECON 22 PLUS	7,5 10 13	110 145 190	1,30 1,30 1,20	32 32 29	4,20 3,80 3,00	140 124 99	22/30	1”	1275	850	1465	500	71
FRECON 30 PLUS	7,5 10 13	110 145 190	1,22 1,22 1,21	43 43 43	5,30 4,60 4,00	187 162 141	30/40	1 1/4”	1575	1030	1750	695	71
FRECON 37 PLUS	7,5 10 13	110 145 190	1,30 1,30 1,30	46 45 44	6,80 5,80 5,00	240 205 177	37/50	1 1/4”	1575	1030	1750	715	71
FRECON 45 PLUS	7,5 10 13	110 145 190	1,30 1,20 1,20	46 43 44	7,60 6,80 5,90	268 240 208	45/60	1 1/4”	1575	1030	1750	945	73
FRECON 55 PLUS	7,5 10 13	110 145 190	2,50 2,40 2,60	88 84 91	9,90 8,20 7,40	350 290 261	55/75	1 1/2”	2000	1200	1810	1290	75
FRECON 75 PLUS	7,5 10 13	110 145 190	2,60 2,50 2,50	91 88 88	12,90 10,90 9,60	456 385 339	75/100	1 1/2”	2000	1200	1810	1390	77
FRECON 90 PLUS	7,5 10 13	110 145 190	6,20 6,00 6,20	220 213 221	16,80 14,40 12,30	593 509 434	90/125	2”	2500	1400	2037	2020	78
FRECON 110 PLUS	7,5 10 13	110 145 190	6,63 7,11 7,04	234 251 249	20,10 17,30 15,00	710 611 530	110/150	2”	2500	1400	2037	2380	78
FRECON 132 PLUS	7,5 10 13	110 145 190	6,90 6,80 9,74	244 239 344	24,30 20,30 18,10	858 717 639	132/180	2 1/2”	2750	1805	2000	2555	78
FRECON 160 PLUS	7,5 10 13	110 145 190	6,80 7,13 8,50	239 252 299	28,20 24,60 21,70	996 869 766	160/220	2 1/2”	2750	1805	2000	2760	78
FRECON 200 PLUS	7,5 10 13	110 145 190	14,03 13,90 13,81	495 490 488	37,50 32,30 28,80	1324 1141 1017	200/270	NW80	3250	2250	2450	4460	79
FRECON 250 PLUS	7,5 10 13	110 145 190	13,60 13,51 13,50	479 477 475	45,20 38,50 33,50	1596 1360 1183	250/340	NW100	3250	2250	2450	5600	79
FRECON 315 PLUS	7,5 10 13	110 145 190	13,20 13,23 12,93	466 467 457	54,10 44,30 38,00	1911 1564 1342	315/430	NW100	3250	2250	2450	6000	79

1. Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
   HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.
2. Refers to free air delivery measured according to ISO 1217:2009, Annex C standard.
3. Refers to sound pressure level measured according to ISO 2151:2004 and ISO 9614/2 with ± 3 dB(A) tolerance. Second values are for 13 bar versions.

HGS & HSC SERIES

Rotary Screw Air Compressors

HERTZ HGS & HSC series compressors are used safely in all applications of small and medium sized businesses thanks to their high performance in operation.

Its service- and maintenance-friendly compact structure speeds up your work, and minimizes downtime.

MAIN MOTOR DRIVE SYSTEM

- Belt-pulley drive system
- Serviceability thanks to easy belt tensioning system

AIR/OIL SEPARATOR

- Easy to disassemble and assemble, service- and maintenance-friendly spin-on type separator.

COOLING SYSTEM

- Quiet and efficient axial fan directly connected to main motor (HGS & HSC 3-20)
- Additional axial fan with temperature control (HGS & HSC 20B-50)

OTHER FEATURES

- Compact, small footprint, easy to service.
- Air tank made of CE certified P265GH pressurized container steel (HGS & HSC 3-20) (EN 286-1)

TECHNICAL DATA

MODEL	PRESSURE		CAPACITY		AIR RECEIVER lt	MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT [kg]	NOISE dB(A)
	bar	PSI	m^3/min	SCFM				Width	Depth	Height		
HGS 2	7,5	110	0,38	13,4	200/250	2.2/3,0	1/2”	1500	550	1350	240	68
HGS 3	7,5 10	110 145	0,41 0,36	14,5 12,7	200/250	3,0/4,0	1/2”	1500	550	1350	245	68
HGS 4	7,5 10 13	110 145 190	0,56 0,46 0,35	19,8 16,3 12,3	200/250	4,0/5,5	1/2”	1500	550	1350	250	69
HGS 5.5	7,5 10 13	110 145 190	0,80 0,65 0,53	28,3 23 18,7	200/250	5,5/7,5	1/2”	1500	550	1325	272	69
HGS 7.5	7,5 10 13	110 145 190	1,15 0,95 0,77	40,6 33,6 27,2	500	7,5/10	3/4”	1810	640	1520	385	69
HGS 11	7,5 10 13	110 145 190	1,70 1,40 1,16	60 49,5 41	500	11/15	3/4”	1880	650	1600	414	69
HGS 15	7,5 10 13	110 145 190	2,25 1,96 1,61	79,5 69,2 56,9	500	15/20	3/4”	1880	650	1600	450	69
HSC 15	7,5 10 13	110 145 190	2,70 2,30 1,90	95,4 81,2 67,1	-	15/20	1”	1275	850	1465	410	69
HSC 18.5	7,5 10 13	110 145 190	3,30 2,80 2,40	116,6 98,9 84,8	-	18,5/25	1”	1275	850	1465	420	69
HSC 22	7,5 10 13	110 145 190	3,80 3,50 3,00	134,2 123,6 106,0	-	22/30	1”	1275	850	1465	450	70
HSC 30	7,5 10 13	110 145 190	4,60 4,00 3,60	162,5 141,3 127,1	-	30/40	1 1/4”	1575	1030	1750	683	70
HSC 30 B	7,5 10 13	110 145 190	5,20 4,30 3,70	183,7 151,9 130,7	-	30/40	1 1/4”	1575	1030	1750	710	70
HSC 37	7,5 10 13	110 145 190	6,40 5,40 4,30	226 190,7 151,9	-	37/50	1 1/4”	1575	1030	1750	742	70

1. Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
   HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.
2. Refers to free air delivery measured according to ISO 1217:2009, Annex C standard.
3. Air receiver volume for the HGS 2-15 series models with only air receiver and air receiver & air dryer respectively.
4. Refers to sound pressure level measured according to ISO 2151:2004 and ISO 9614/2 with ± 3 dB(A) tolerance.
5. Dimensions of the models with only air-receiver for HGS 2-15 series.
6. Weights of the models with only air-receiver for HGS 2-15 series.

HSC SERIES
Rotary Screw Air Compressors

HERTZ HSC Series compressors are reliable compressors which may be easily used in many applications. Manufactured with high-performance and high-quality equipment, these compressors can be easily used by users with every level of experience.

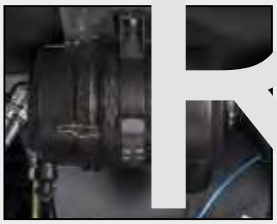
Proven design and reliability with tens of thousands of compressors used in the field

MAIN MOTOR DRIVE SYSTEM
- Belt-pulley drive system
- Serviceability thanks to easy belt tensioning system

AIR/OIL SEPARATOR
- High performance separation with three-stage design
- Efficient separation at lower volume with deeply wrapped, intertwined separation layers
- Low amount of oil mist in outlet air ≤ 3 ppm

COOLING SYSTEM
- Quiet and efficient axial fan
- Temperature-controlled fan motor

COMPONENTS
- High-quality components with a long service life.



TECHNICAL DATA

MODEL	PRESSURE		CAPACITY		MOTOR POWER kW/HP	CONNECTION SIZE	DIMENSIONS mm			WEIGHT kg	NOISE dB(A)
	bar	PSI	m^3/min	SCFM			Width	Depth	Height		
HSC 45	7,5 10 13	110 145 190	7,2 6,4 5,4	254 226 191	45/60	1 1/4”	1575	1030	1750	876	75
HSC 55	7,5 10 13	110 145 190	9,6 8,5 6,6	339 300 233	55/75	1 1/2”	2000	1200	1810	1340	76
HSC 75	7,5 10 13	110 145 190	12,4 10,5 8,7	438 371 307	75/100	1 1/2”	2000	1200	1810	1610	78
HSC 90	7,5 10 13	110 145 190	15,8 13,5 11,0	557 477 388	90/125	2”	2500	1400	2037	2240	79
HSC 110	7,5 10 13	110 145 190	18,8 16,5 14,0	664 583 495	110/150	2”	2500	1400	2037	2500	79
HSC 132	7,5 10 13	110 145 190	22,8 19,5 16,0	805 689 565	132/180	2 1/2”	2500	1805	2000	2873	79
HSC 160	7,5 10 13	110 145 190	27,4 23,0 19,5	968 812<

HSC D SERIES
Rotary Screw Air Compressors

HERTZ HSC D series compressors deliver high performance by reducing the power transfer losses with their directly-coupled motor and screw block. Operation expenses are reduced thanks to usage of the latest generation screw block and motor. Stops are minimized with continuously supplied air.

MAIN MOTOR DRIVE SYSTEM

- Long life and efficient power transfer thanks to the use of elastic coupling

SCREW BLOCK
- Gear box as per AGMA (American Gear Manufactures Association) standards for products where threaded screws are used
- Directly-coupled

AIR/OIL SEPARATOR
- High performance separation with three-stage design
- Efficient separation at lower volume with deeply wrapped, intertwined separation layers
- Low amount of oil mist in outlet air ≤ 3 ppm

COOLING SYSTEM
- Quiet and efficient axial fan
- Temperature-controlled fan motor

TECHNICAL DATA

MODEL	PRESSURE		CAPACITY		MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT kg	NOISE dB(A)
	bar	PSI	m³/min	SCFM			Width	Depth	Height		
HSC 22 D	7,5 10	110 145	4,0 3,6	141 127	22/30	1”	1275	850	1465	483	70
HSC 30 B D	7,5 10 13	110 145 190	5,5 4,5 3,9	194 159 138	30/40	1 1/4”	1575	1030	1750	731	70
HSC 37 D	7,5 10 13	110 145 190	6,6 5,6 4,6	233 198 163	37/50	1 1/4”	1575	1030	1750	742	70
HSC 45 B D	7,5 10 13	110 145 190	8,5 7,1 5,9	300 251 208	45/60	1 1/2”	2000	1200	1810	1370	74
HSC 55 D	7,5 10 13	110 145 190	9,8 8,7 7,0	346 307 247	55/75	1 1/2”	2000	1200	1810	1520	76
HSC 75 D	7,5 10 13	110 145 190	12,6 11,0 9,2	445 388 325	75/100	1 1/2”	2000	1200	1810	1670	78
HSC 90 D	7,5 10 13	110 145 190	16,2 13,7 11,2	572 484 396	90/125	2”	2500	1400	2037	2240	79
HSC 110 D	7,5 10 13	110 145 190	19,5 17,9 14,0	688 632 494	110/150	2”	2500	1400	2037	2640	79
HSC 132 D	7,5 10 13	110 145 190	23,4 20,0 16,5	826 706 583	132/180	2 1/2”	2750	1805	2000	2970	79
HSC 160 D	7,5 10 13	110 145 190	28,0 23,5 20,0	989 830 706	160/220	2 1/2”	2750	1805	2000	3080	79
HSC 200 D	7,5 10 13	110 145 190	37,0 30,8 24,5	1307 1088 865	200/270	NW80	3250	2250	2450	4920	79
HSC 250 D	7,5 10 13	110 145 190	45,0 38,6 32,6	1590 1368 1151	250/340	NW100	3250	2250	2450	5600	79
HSC 315 D	7,5 10 13	110 145 190	53,0 45,5 39,5	1872 1607 1395	315/430	NW100	3250	2250	2450	5920	79

1. Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
   HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.
2. Refers to free air delivery measured according to ISO 1217:2009, Annex C standard.
3. Refers to sound pressure level measured according to ISO 2151:2004 and ISO 9614/2 with ± 3 dB(A) tolerance.

HRSC SERIES
Rotary Screw Air Compressors

Hertz HRSC series compressors are designed to meet the pressurized air requirements of rail system vehicles.

GENERAL SPECIFICATION

- Long maintenance intervals and low maintenance costs
- Optional installation on the cars (on the car, inside the car or under the car)
- Quiet operation, low vibration
- Light and compact structure
- Reliable and durable
- Directly-coupled drive system
- CE Certified air tanks complying with SPVD (Simple Pressure Vessel Directive) and designed as per EN 286-3 standard

MAIN MOTOR AND DRIVE SYSTEM

- Directly coupled with the elastic coupling

COOLING SYSTEM

- Quiet and efficient axial fan directly connected to the main motor)

SEPARATORS AND COMPACT AIR DRYER

- Cartridge type mechanical dryer that separates oil particles and aerosols
- Easy-to-detach spin-on type separator

MULTI-BLOCK

- Oil separator filter
- Minimum pressure valve
- Thermostatic valve

ELECTRICAL SYSTEM

- Compact distribution panel integrated to the body
- Simple and effective motor starting system
- 24 DC control system

TECHNICAL DATA

MODEL	PRESSURE		CAPACITY		MOTOR SPEED rpm	MOTOR POWER kW/HP	CONNECTION SIZE	DIMENSIONS mm			WEIGHT kg	NOISE dB(A)
	Bar	PSI	lt/min	SCFM				Width	Depth	Height		
HRSC 4	10	145	310	11	2950	3/4	1/2”	1100	886	485	125	67
HRSC 10	10	145	800	28	2950	7,5/10	1/2”	1328	940	540	235	69
HGS 5,5 D M	7	100	650	23	2950	5,5/7	1/2”	1000	550	625	205	69

Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

2. Refers to free air delivery measured according to ISO 1217:2009, Annex C standard.
3. Refers to sound pressure level measured according to ISO 2151:2004 and ISO 9614/2 with ± 3 dB(A) tolerance.

HPA SERIES

Portable Rotary Screw Air Compressors

HPA series portable compressors are ideal for use in construction, mining and ship repair industries. These compressors offer their users long maintenance intervals, high performance and airflow thanks to their high-strength and high-efficiency screw blocks. Large fuel tanks make it possible to work longer without interruption.

GENERAL SPECIFICATION

- 2 or 3 or 4 for HPA 340 and HPA 500; 3 for HPA 640; and 4 for HPA 1000
- Type approval certificate complying with EU2007/46/EC chassis directive. (Road Certificate in accordance with European norms)
- Capacity control by changing diesel engine speed
- Compressor housing resistant against corrosion and impacts
- Severe Servers that may be opened by the sides
- High-efficiency engine and fuel tank capacity providing up to 10 hours of continuous operation at full load
- Low vibration level

SCREW BLOCK

- Gear AGMA (American Gear Manufactures Association) standards for products where threaded screws are used

MAIN MOTOR AND DRIVE SYSTEM

- Diesel engine with 4 cylinders, water cooling and turbocharger except for HPA 340
- Emission state complying with exhaust emission standards (except HPA 1000)
- Dly coupled with the elastic coupling

TRAILER TYPES

- Without Trailer/With Chassis
- With brake, with fixed trailer
- Without brake, with fixed trailer
- With brake, with mobile trailer (Height of the connection point to the vehicle may be adjusted)
- Without brake, with mobile trailer

STANDARD EQUIPMENT

- Signalling
- Check v
- Cabinet security lock
- Safety chain (HPA 640 & HPA 1000)
- Chock and chock holder
- Trailer connection coupling
- Rubber hose connection coupling

OPTIONS

- Safety chain (HPA 340 & HPA 500)
- Heat allows operation up to -30 °C (HPA 340 & HPA 500)
- Aftercooler and water separator

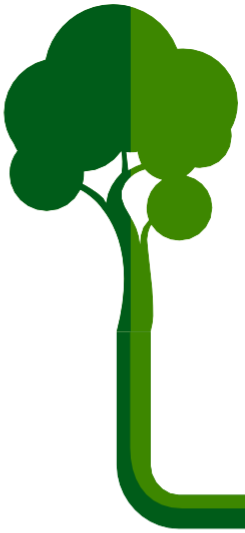
TECHNICAL DATA

MODEL	PRESSURE		CAPACITY		ENGINE MODEL	FUEL TANK CAPACITY lt	ENGINE POWER kW/HP	CONNECTION SIZE	DIMENSIONS [mm]			WEIGHT kg	NOISE dB(A)
	bar	PSI	m³/min	SCFM					Width	Depth	Height		
HPA 340	7	102	3,4	120	KUBOTA V1505-E3B	50	26,5/35	2xG3/4"	2000/3020	1150/1650	1300/1500	690	≤ 98
HPA 500	7 10 12	102 145 174	5,0 4,1 3,4	177 145 120	KUBOTA V1505-E3B	85	33/45	1xG1"+2xG3/4"	2000/3020	1150/1650	1300/1600	725	≤ 98
HPA 640	7	102	6,4	226	KUBOTA V2403-M-T-E3B	125	44/60	1xG1"+2xG3/4"	2250/3720	1200/1650	1370/1500	1050	≤ 98
HPA 1000	7 10 12	102 145 174	10,0 8,5 7,5	353 300 265	KUBOTA V3800-DI-T-E2B	125	72,8/100	1xG11/2"+3xG3/4"	2250/3720	1200/1650	1470/1600	1250	≤ 99

1. Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
   HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.
2. Refers to free air delivery measured according to ISO 1217:2009, Annex C standard.
3. Refers to sound pressure level measured according to ISO 2151:2004 and ISO 9614/2 with ± 3 dB(A) tolerance.
4. First value is valid for the base mounted version and the second value is valid for the mobile trailer versions.

ENERGY EFFICIENCY

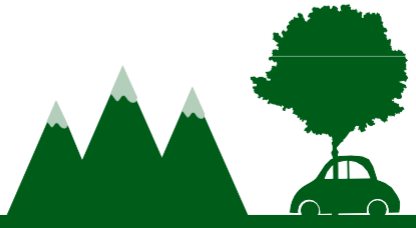
WOULD YOU LIKE TO WORK WITH HERTZ
TO REDUCE YOUR COMPRESSED AIR
ENERGY COSTS BY **33%** AND CONSUME
ENVIRONMENTAL RESOURCES 5% **LESS?**



33%
OF CO2
EMISSIONS ARE
GENERATED BY THE
INDUSTRIAL
ORGANIZATIONS.

10%
OF THIS POWER
IS USED BY
PRESSURIZED
AIR SYSTEMS.

32.9%
OF THE ELECTRICAL
ENERGY USED
FOR COMPRESSED AIR
SYSTEMS CAN BE SAVED.*



* Maximum amount of savings that can be achieved with the optimization workas per EU directives.

37%
OF THE
WORLD'S NATURAL
GAS RESERVES, AND 77%
OF THE COAL DERIVATIVES
ARE CONSUMED BY
INDUSTRIAL ORGANIZATIONS.

40%
OF ALL ELECTRIC POWER
IS CONSUMED BY
INDUSTRIAL
ORGANIZATIONS
GLOBALLY.

HERTZ ENERGY EFFICIENCY OPTIMIZATION FIELDS

Improvement of cooling, drying and filtration operations:
Efficient results are obtained by using the correct cooling method, and increasing the amount of high quality and pure air. Filtration permeability and filtration quality reduce line losses and save money. Hertz provides consultancy and applies projects on this subject.

Usage of high efficiency motors in compressors
IE3 motors are about 2% more efficient than IE2 motors, while the IE4 engines are about 3% more efficient. Hertz offers IE3 efficiency class as standard, and IE4 motor efficiency class is applied as optional.

Usage of variable speed drive
Hertz FRECON Plus series compressors are much more efficient than standard compressors in cases where variable air is required. Especially when there is variable air consumption due to changing operating conditions, the use of a variable speed drive saves money by providing operation as required.

Utilization of waste heat
Thanks to Hertz heat recovery systems, approximately 75% of the total energy consumed may be recovered. The operating principal for these systems is to heat hot water by the oil temperature through a plate heat exchanger. Hertz optional heat recovery system is a practical and efficient solution.

Modification of Control Management Systems
With the use of multiple controllers and the equal ageing system, the initial set pressure range is restricted to achieve optimum energy consumption; and this operation is performed with automatic controller instructions.

Reduction of pressure losses
It is recommended that the differential pressure in the main air lines is 0.3 bar maximum between the production and the end usage points. 1 bar pressure loss in the system may cause 5-7% extra energy consumption. Hertz Project department provides consultancy on correct air installation and implements the projects.

Monitoring the performance of the compressors and renewal of the compressors
Compressor may turn to be a machine that consumes more energy and generates less air during its service life due to friction losses and space tolerances in the rotating equipment such as screw rotors, electric motors, etc. When the required intervention is performed with the use of genuine spare parts and replacement of the machines with new machines more advanced in technology, the business may avoid the loss of more money. Hertz after sales service department is your solutions partner in this context with compressor replacement, general overhaul services and the service operations offered to every brand.

New system design
Hertz Project department provides reports on the calculation of consumption values and inspection of the accuracy of these calculations, on short, medium and long term growth projections, on the quality, energy consumption, maintenance costs of the selected equipment, and on initial investment costs for new investments and projects, and prepares the projects and performs implementation of the projects if required.
It is your solutions partner A to Z.

Reducing air losses

Hole Diameter	Air Consumption 6 bar m³/min	Loose	
		Kw	€
1 mm	0,065	0.3	277
2 mm	0,240	1.7	1.5270
4 mm	0,980	6.5	6,000
6 mm	2,120	12.0	11,100

Electric cost: 0.185 TRY/Kw h
Running hours: 5,000 hours/year

PRESSURIZED AIR IS THE MOST EXPENSIVE ENERGY, PLEASE DO NOT IGNORE AIR LEAKS IN YOUR DEPARTMENTS, AND USE THE PRESSURIZED AIR CAREFULLY.

hertz
KOMPRESSOREN

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HPC SERIES

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RECIPROCATING AIR COMPRESSORS

MAIN MOTOR AND DRIVE SYSTEM

- High efficiency 400V/3 phase/50Hz IE3 IP55 electric motor
- Special loadless start system and automatic discharge system for loadless start

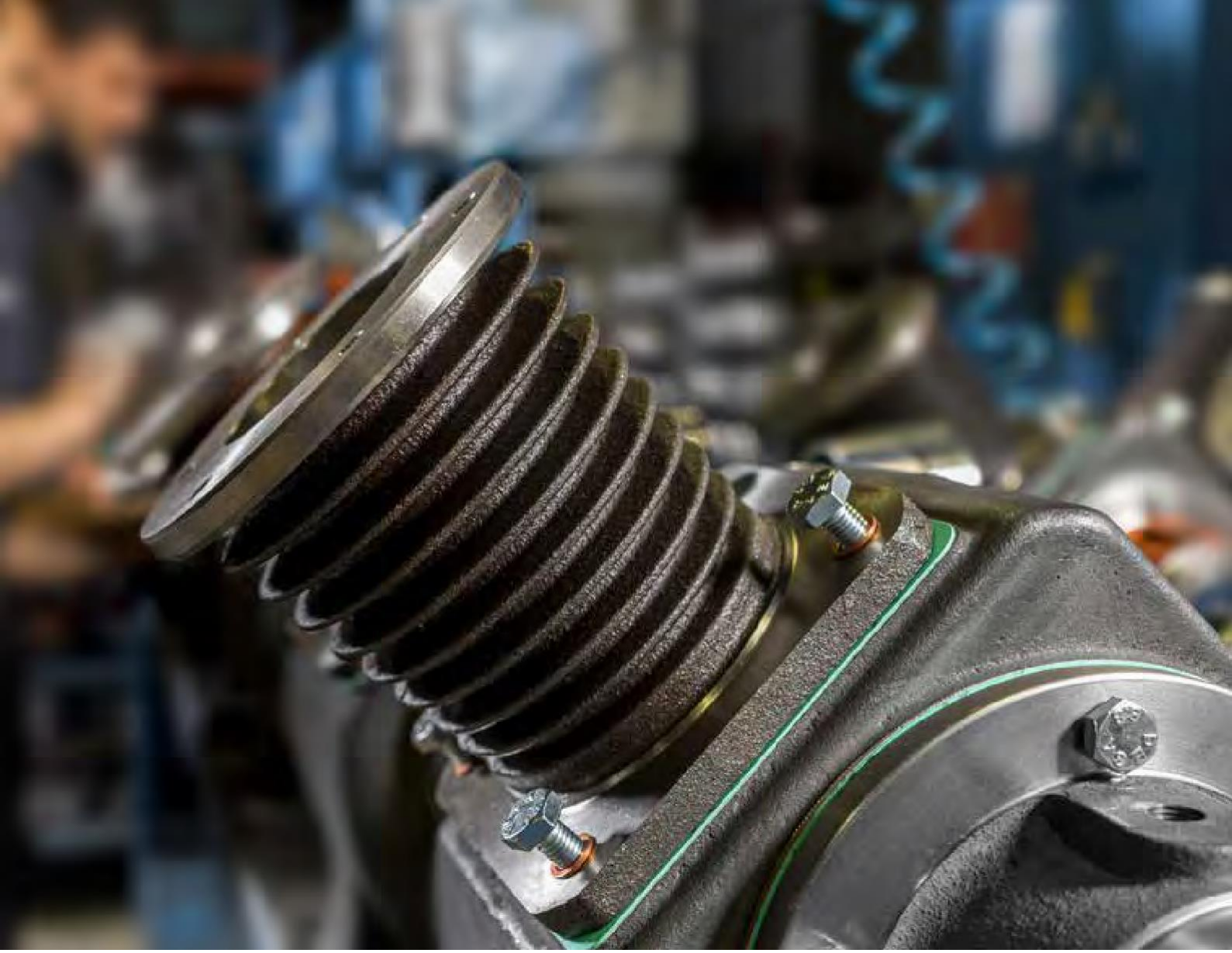
COMPRESSOR BLOCK

- Cast iron cylinder with cooling fins and special aluminium alloy cylinder heads
- Specially designed high-speed stainless steel concentric valves.
- Cast iron crankcases with high strength
- Dynamically-balanced cast steel crankshaft and counterweight
- Special alloy aluminium pistons and steel cast connecting rods
- Specially designed finger-type, high-capacity stainless steel suction-discharge valves
- Stainless steel suction-discharge valves, specially designed for high pressure strength

CONTROLLER*

- Internal phase protection relay function
- Function for monitoring the mains voltage and frequency and keeping these at specified limits
- Multiple compressor control with up to 8 compressors without requiring an external main controller
- ModBus communication feature
- Alarm History Record for the last 9 alarms

*Only on Pet Plus and Wave reciprocating models with high pressure



GENERAL OPTIONS

- air M motor with IE4 efficiency class
- air M voltage options other than 400 V/3 phase/50 Hz
- ig h pressure air dryer*

*On reciprocating models with high

HPC SINGLE AND DOUBLE STAGE
Reciprocating Air Compressors

HERTZ reciprocating compressors have laid the foundation of the trust for the Hertz brand as they had been working for many years in many different applications and industries, especially in small enterprises since 1969, when they were first produced. Hertz reciprocating compressors, which are trouble-free and with a long service life, may be used safely in many applications with single and double stage options.

MAIN MOTOR AND DRIVE SYSTEM

- Belt-pulley drive system
- Specially designed fan type pulleys
- Easy tensioning of belt

SAFETY SYSTEMS

- Solenoid discharge valve for loadless start (on models over 4 kW)
- Pressure switch
- Check valve
- Belt pulley guard
- Relief valve
- Easy tensioning of belt

OTHER FEATURES

- CE certified air tanks complying with SPVD (Simple Pressure Vessel Directive) and designed as per EN 286-1 standard
- Bearings with a long service life
- Air suction filter and silencer
- Impact lubrication system
- Starting panel (For 1.1 - 4 kW models)

OPTIONS

- Automatic Condensate Discharge Valve for the Air Tank
- Star delta motor starting panel (For 5.5-7.5kW models)

TECHNICAL DATA

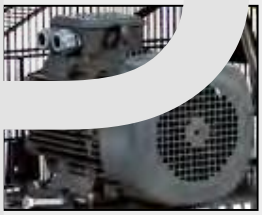
MODEL	PRESSURE		CAPACITY (intake)		MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT kg	AIR RECEIVER lt
	bar	PSI	lt/min	SCFM			Width	Depth	Height		
Single-Stage Reciprocating Series											
HPC-S1	8	115	205	7.2	1,1/1,5	1/2”	1202	426	894	93	80
HPC-S2	8	115	327	11.5	1,5/2,0	1/2”	1202	426	914	106	80
HPC-S3	8	115	410	14.5	2,2/3,0	1/2”	1531	450	1037	135	200
HPC-S5	8	115	607	21.4	4,0/5,5	1/2”	1830	466	1145	209	250
HPC-S7	8	115	1013	35.8	5,5/7,5	3/4”	1927	664	1291	308	500
HPC-S10	8	115	1657	58.5	7,5/10	3/4”	1926	668	1413	390	500
Double-Stage Reciprocating Series											
HPC-T2/200	12	175	205	7.2	1,5/2,0	1/2”	1532	450	983	145	200
HPC-T5	15	215	507	17.9	4/5,5	3/4”	1832	474	1097	230	250
HPC-T7	12	175	856	30.2	7,5/10	3/4”	1920	658	1298	374	500
HPC-T10	15	215	828	29.2	7,5/10	3/4”	1925	669	1406	439	500

HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

HPC SERIES STARTING AIR

High PressureReciprocating Air Compressors

HERTZ proudly introduces HPC series of high pressure reciprocating compressors, which are developed in order to be used in all applications requiring high pressure, especially in the maritime sector, where Hertz has shown a keen interest and served from the day of its establishment until today.



MAIN MOTOR AND DRIVE SYSTEM

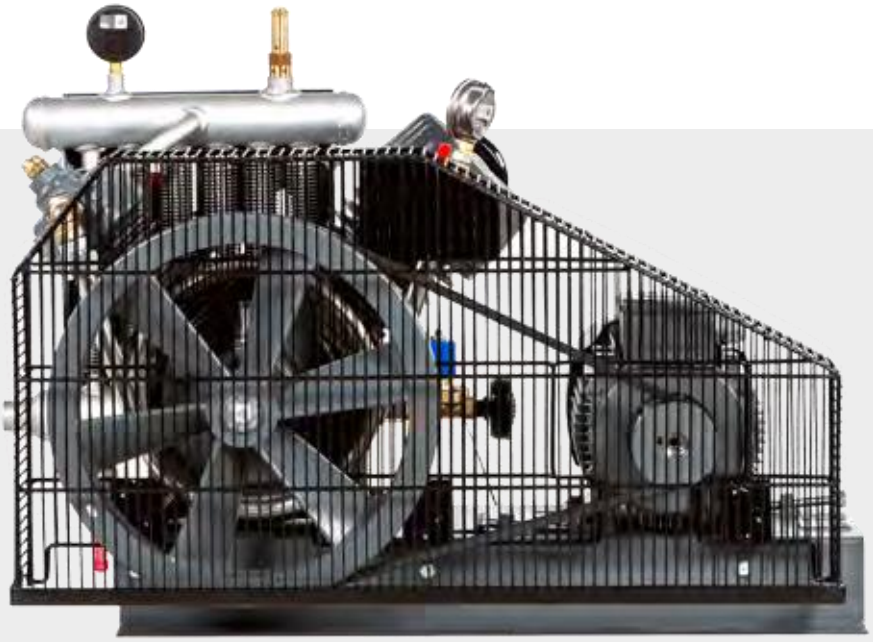
- Belt-pulley drive system
- Specially designed fan type cast iron pulley
- y Belt tensioning system

SAFETY SYSTEMS

- Manual discharge valve
- Integrated check valve on the air outlet line
- Belt pulley housing grill
- High pressure switch
- First and second stage safety valves
- Outlet pressure manometer
- First stage pressure manometer

OTHER FEATURES

- Turkish and French Lloyd Bureau Veritas type-approval certifications
- Automatic discharge system for loadless start
- Bearings with a long service life
- Outlet air cooling radiator
- Air suction filter and silencer



OPTIONS

- High pressure dryer
- High pressure air tank made of CE certified P265GH pressurized container steel
- Star delta motor starting system
- Main motor with IE4 efficiency class

TECHNICAL DATA

MODEL	PRESSURE		CAPACITY (intake)		MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT kg
	bar	PSI	lt/min	SCFM			Width	Depth	Height	
HPC-H5	40	580	507	17,9	4/5.5	3/4”	933	576	662	153
HPC-H15	40	580	1060	37,4	11/15	1”	1312	1213	718	363
HPC-H20	40	580	1657	58,5	15/20	1”	1295	897	832	422

1. HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

HPC BOOSTER SERIES

Reciprocating Booster Air Compressors

HERTZ pressurizes the air entering the compressor at 7-13 bar up to 40 bars with the HPC Boosters Series booster compressors in its production range. The HPC Boosters Series products have been preferred by pet bottle manufacturers for many years and have been successfully used in many companies.

MAIN MOTOR AND DRIVE SYSTEM

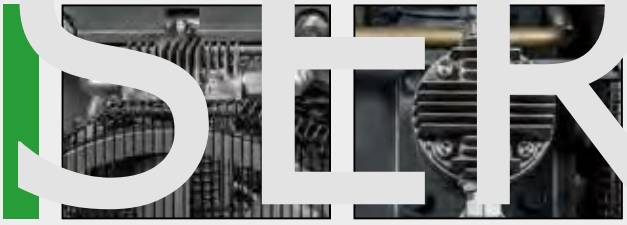
Belt-pulley drive system
Specially designed fan type cast iron pulley
Easy belt tensioning system

SAFETY SYSTEMS

- Intake air control system
- High pressure switch
- Manual discharge valve
- Integrated check valve on the air outlet line
- Belt pulley housing grill
- Outlet pressure manometer
- High pressure relief valve

OTHER FEATURES

- Automatic discharge system for loadless start
- Bearings with a long service life
- Outlet air cooling radiator
- Loaded-Unloaded operating options
- Air suction filter and silencer for unloaded operation
- Lubrication system with whisking rod
- Oil level gauge
- Special discharge system preventing oil leakage from blowdown valve



OPTIONS

- High pressure air dryer
- High pressure air tank made of CE certified P265GH pressurized container steel (EN 286-1)
- Air filtering system with oil trap
- Food grade oil option
- Main motor with IE4 efficiency class

TECHNICAL DATA

MODEL	PRESSURE				CAPACITY (intake)						MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT kg
	Minimum		Maximum		m^3/min	SCFM	m^3/ min	SCFM	m^3/ min	SCFM			Width	Depth	Height	
	bar	PSI	bar	PSI												
HPC BOOSTER 10	15	218	40	580	2,10	74,2	2,89	102,1	3,67	129,6	7,5/10	1”	1286	825	753	268
HPC BOOSTER 15	15	218	40	580	2,45	86,5	3,37	119,0	4,29	151,5	11/15	1”	1286	825	753	285
HPC BOOSTER 20	15	218	40	580	3,71	131,0	5,10	180,1	6,49	229,2	15/20	1”	1357	820	758	300
HPC BOOSTER 25	15	218	40	580	4,90	173,1	6,73	237,7	8,57	302,7	18,5/25	1 1/4”	1423	874	736	345
HPC BOOSTER 30	15	218	40	580	5,56	196,4	7,65	270,2	9,74	344,0	22/30	1 1/4”	1423	881	736	390
HPC BOOSTER 40	15	218	40	580	6,68	235,9	9,18	324,2	11,68	412,5	30/40	1 1/4”	1423	972	736	426

HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

HPC PET PLUS SERIES
Reciprocating Booster Compressors

HERTZ Pet-Plus new generation booster series compressors are designed to meet all the requirements of the customers with its low energy consumption and compact structure. These compressors may operate continuously at low operating temperatures with their integrated oil pumps and aluminium combo boilers.

ADVANTAGES
- Direct coupled, no loss of power transfer
- Continuous operation with integrated oil pump
- Low output air temperature with aluminium combo radiator
- Coupled power panel and separator

MAIN MOTOR AND DRIVE SYSTEM
- Direct coupled one on one with the elastic coupling

COOLING SYSTEM
- 2 stage radiator (1 stage for air, 1 stage for oil cooling)
- Pre-cooling with valves and cylinders with cooling fins
- Cooling fan directly connected to the main motor

LUBRICATION SYSTEM
- Lubrication of the pistons and pins is performed by the integrated oil pump driven by the main motor.

CONDENSATE DISCHARGE SYSTEM
- Condensation water in the radiator is trapped by the integrated water separator and then it is removed from the system at certain intervals by the solenoid valve.

CABINET DESIGN

- The lightweight and durable composite cabinet improves cooling performance, protects the upper heads from impact, and protects the operator from moving and hot equipment.

ELECTRICAL SYSTEM

- PLC based control and system monitoring with digital display panel
- Multi-operation up to 8 compressors with optional equal ageing
- Flexible operation with up to 100 user parameters such as input-output air pressure and temperature, minimum operating, minimum oil pressure and maximum operating temperature

OPTIONS

- Integrated air dryer
- Integrated air tank made of CE certified P265GH pressurized container steel
- Air system with oil trap
- Food grade oil option
- Main motor with IE4 efficiency class
- Soft starter

TECHNICAL DATA

MODEL	PRESSURE		DISPLACEMENT (Intake) CAPACITY						MOTOR POWER kW/HP	CONNETION SIZE	DIMENSIONS mm			WEIGHT kg
	bar	PSI	7 bar		10 bar		13 bar				Width	Depth	Height	
			m3/ min	SCFM	m3/ min	SCFM	m3/ min	SCFM						
HPC PET-PLUS 25	40	580	4,5	158	6,2	218	7,9	277	18,5/25	1"	1380	1100	1030	450
HPC PET-PLUS 40	40	580	7,0	248	9,7	341	12,3	434	30/40	1"	1485	1100	1030	510
HPC PET-PLUS 50	40	580	9,7	342	13,3	471	17,01	599	37/50	1 1/2"	1690	1175	1100	745
HPC PET-PLUS 60	40	580	11,6	409	16,0	563	20,2	716	45/60	1 1/2"	1690	1175	1100	775

HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

WAVE SERIES

High Pressure Reciprocating Air Compressors

Hertz proudly introduces new generation Wave of high pressure reciprocating compressors taking advancing the WAVE Series, which were developed in order to be used in all applications requiring high pressure, especially in the maritime sector, where Hertz has shown a keen interest and served from the day of its establishment until today.

MAIN MOTOR AND DRIVE SYSTEM

- Direct coupled with the elastic coupling
- Star delta motor starting system

COOLING SYSTEM

- 4 stage radiator (3 stage for air, 1 stage for oil cooling)
- Piston cooling with concentric valves with cooling fins
- Cooling fan directly connected to the main motor

LUBRICATION SYSTEM

- Lubrication of the pistons and pins is performed by the integrated oil pump driven by the main motor.

ELECTRICAL SYSTEM

- Flexible operation with multiple user controlled parameters (such as input, output air pressure, temperature, maximum operating pressure, maximum oil pressure, maximum operating temperature)
- PLC based control and system monitoring with digital display panel

CONDENSATE DISCHARGE SYSTEM

- Condensation water in the radiator is trapped by the integrated water separator and then it is removed from the system at certain intervals by the solenoid valves.

CABINET DESIGN

- The lightweight and durable composite cabinet improves cooling performance, protects the upper heads from impact, and prevent the operator from touching moving and hot equipment.

OPTIONS

- High air dryer
- High air tank made of CE certified P265GH pressurized container steel
- Air system with oil trap
- Food grade oil option
- Main motor with IE4 efficiency class
- Soft s

TECHNICAL DATA

MODEL	PRESSURE				CAPACITY (intake)		MOTOR SPEED rpm	VOLTAGE FREQUENCY V/Hz	MOTOR POWER kW/HP	CONNECTION SIZE	DIMENSIONS mm			WEIGHT kg	NOISE dB(A)
	Maximum		Minimum		lt/min	SCFM					Width	Depth	Height		
	bar	PSI	bar	PSI											
HW64	40	580	12	174	1077 1293	38,1 45,7	1500 1800	380-415/50 440-460/60	11/15 13/18	1"	1300	1100	1030	411	80
HW108	40	580	12	174	1807 2168	63,8 76,6	1500 1800	380-415/50 440-460/60	15/20 22/30	1"	1300	1100	1030	421	81
HW166	40	580	12	174	2767 3321	97,7 117,3	1500 1800	380-415/50 440-460/60	30/40 36/48	1"	1580	1175	1100	630	83
HW210	40	580	12	174	3526 4232	124,6 149,5	1500 1800	380-415/50 440-460/60	37/50 44/59	1"	1640	1175	1100	680	84

HERTZ KOMPRESSOREN reserves its rights to make changes in its products and specifications without prior notice.

PET MASTER

Oil-Free Reciprocating Compressors

HERTZ PET MASTER Series
are reliable and high performance oil free reciprocating air compressors used in the pet bottling, food and health industries.

ADVANTAGES

- PET Master Compressors provide 100% oil-free pressurized air as no oil is used in the compression chamber.
- They operate between 0 and 40 Bar. As they have an integrated structure, they occupy less space and provide ease of installation and installation.

GENERAL SPECIFICATION

- For intercoolers and aftercoolers, stainless steel pipe is used which is more efficient in terms of heat transfer and more resistant to corrosion.
- The structure of the coolers is designed to transfer air through the pipe and water through the body wall. Thanks to their compact design, pipe-type coolers are easy-to-maintain and their cooling efficiency is high.
- Compressor provides energy saving by operating with Load / Unload control system within maximum and minimum pressure set values determined according to system requirements.
- With belt and low speed operation feature reduce the workload of the compressor.
- The integrated electrical system provides user-friendly operation.

CONTROLLER

- Advanced, high-definition, user friendly 7” color touchscreen
- High speed, industrial type PLC infrastructure with robust construction
- Access Protection system with various levels of authorization.
- Display relevant data on the screen clearly, trend graph recording and active monitoring
- Alarm History Record for the last 100 alarms
- Ethernet / ModBus communication functions as standard
- Remote monitoring and control feature / Compliance with GSM, internet and Industry 4.0
- Flexible programmable/expandable Input /Output structure

TECHNICAL DATA

MODEL	Pressure	R.P.M	Capacity	MOTOR POWER kW/HP	DIMENSIONS mm			WEIGHT
	Bar		m^3/min		Width	Length	Height	kg
PET MASTER 50	40	300	3,6	37/50	1811	3533	2403	4800
PET MASTER 75	40	455	5,5	55/75	1811	3533	2403	4900
PET MASTER 100	40	385	7,4	75/100	1812	3550	2431	6300
PET MASTER 125	40	455	9,10	90/125	1812	3550	2431	6400
PET MASTER 150	40	380	11,6	110/150	1975	4168	2814	7350
PET MASTER 180	40	460	13,5	132/180	1975	4168	2814	7450
PET MASTER 220	40	460	16,4	160/220	1975	4168	2814	7850
PET MASTER 270	40	405	21,3	200/270	2212	4223	2840	9100
PET MASTER 300	40	450	23,0	220/300	2212	4223	2840	9200

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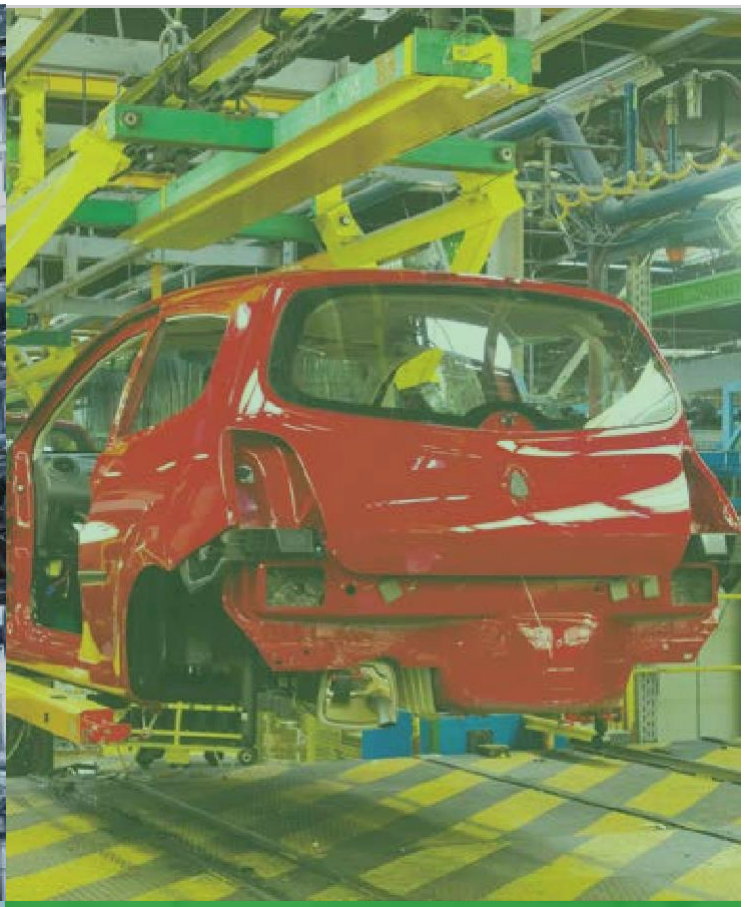
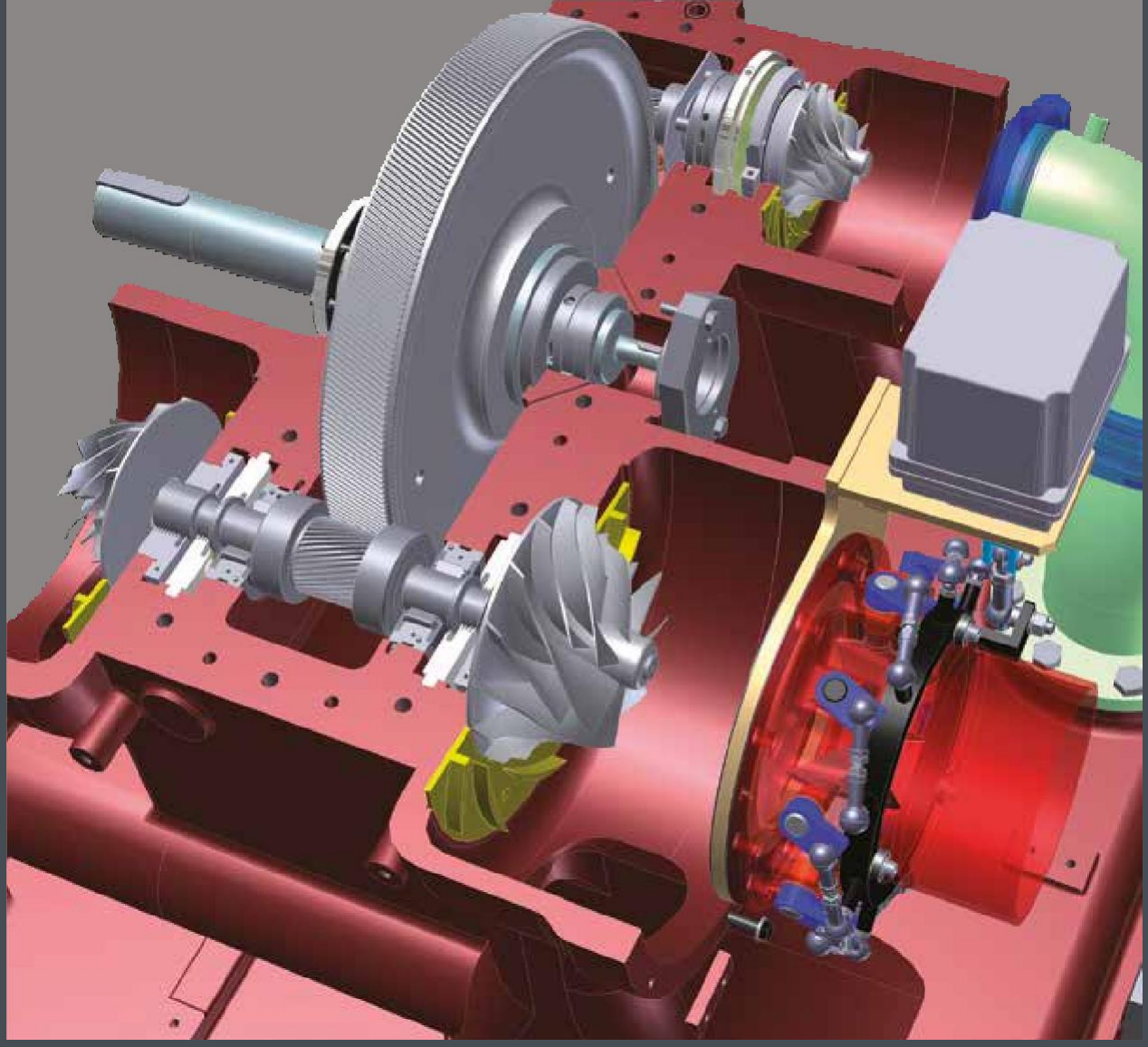


TURBO
COMPRESSORS



ENERGY SAVING

The use of advanced turbo machine technology provides first class energy efficiency. Hertz Kompressoren meets stringent energy saving requirements we encounter today with its turbo compressors that offer high level of energy saving.

USER SPECIFIC DESIGN

The requirement for pressurized air in production areas often varies. Hertz Kompressoren offers optimal solutions for its customers in order to offer the best solution for their manufacturing operations.

Hertz Kompressoren Turbo Compressors have been audited by an independent third party (TÜV, Germany) and received the best rating, i.e. Class 0 (100%) oil-free certificate.*

Class Oil free ISO 8573-1

DURABLE BODY

THE GEAR BOX AND AIR COOLERS ARE CAST IN A SINGLE PIECE, AND THEY HAVE A COMPACT AND DURABLE STRUCTURE. COMPRESSOR UNIT AND AIR DUCTS ARE SURROUNDED BY A THICK AND UNWELDED WALL, AND THIS STRUCTURE IS VERY EFFECTIVE FOR REDUCING NOISE.

TITANIUM IMPELLERS

Designed with Hertz Kompressoren's vast experience and CFD technology, 3D impellers offer the highest level efficiency in the world and a wide operating range to the customers.

With the use of impellers made of titanium (except TRX), you shall not encounter problems such as wear and corrosion.

DIFFUSERS

Speed energy charged to air by the rotation of the impellers is efficiently converted into pressure energy by the diffusers. With CFD technology, diffusers and impellers are analysed together to ensure minimum air turbulence, and thus operation noise is minimized.

IGV (INTAKE GUIDE VANES)

With IGV, the air intake is controlled according to the consumption, furthermore, the efficiency is also increased as the air intake is provided in the same direction as the direction of rotation of the impellers.

PADDED ROLLER BEARING

Padded roller bearings, which allow high-speed and stable operation, are used. Pads move according to the variation of the bearing load, which ensures perfect adaptation to the load changes in the compressor.

LABYRINTH SEAL

The air and oil seals are labyrinth type and they do not contact the shaft. For this reason, abrasions do not occur and they do not require periodic replacement.

TRX serisinde yüksek mukavemetli paslanmaz çelik impellerlar kullanılmaktadır.

IMPELLER

- Made of titanium and stainless steel, impeller is very resistant to corrosion and abrasion. As a result, it does not require periodic replacement, and thus the maintenance costs are reduced.

OPTIMUM IMPELLER DESIGN

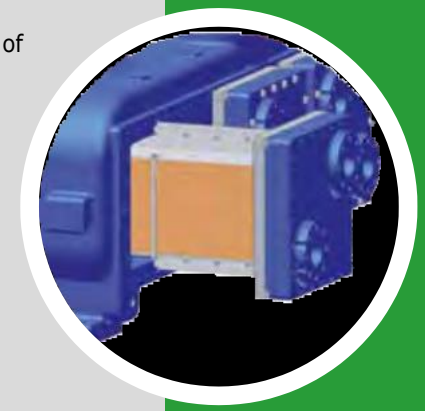
- Optimum impeller designs prepared to meet your requirements on flow rate and pressure provide energy saving.

PADDED ROLLER BEARING

- Roller Bearings are used as bearings of impellers rotating at high speed. No abrasion occurs as the bearings are contactless, and the service life of the part is increased significantly.

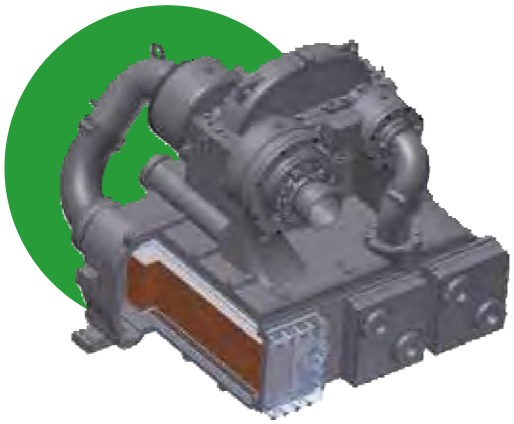
AIR COOLERS (INTERCOOLERS, AFTERCOOLERS)

- The ability of compressors to operate at maximum efficiency for many years is directly proportional to the performance of the coolers used. All Hertz Kompressoren turbo compressors use "copper pipe and copper fin" heat exchangers as standard feature. Thus, it is possible to achieve high cooling performance, and a long service life.



VARIOUS OPTIONS

- We offer different options such as compressor cabinet and group control panel to meet the requirements of our customers.

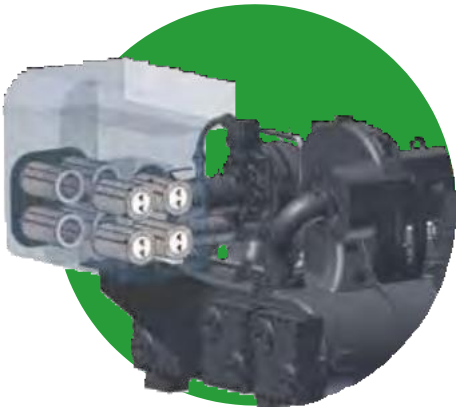


MAIN BODY OF THE COMPRESSOR
(SINGLE PIECE GEAR BOX AND AIR COOLERS)

- The gear box and air coolers are cast in a single piece, and they have a compact and durable structure. Thanks to the unique design of the compressor body, noise level is reduced while the pressure losses are also reduced. Moreover, maintenance costs are reduced significantly, too.

SUCTION FILTER

- The cartridge type filter elements used in the suction filter have a very long service life and their maintenance is very easy.



CONTROL PANEL

OPERATING CONDITIONS

- Thanks to the easy-to-read graphs of the control panel, it is possible to control the main measurements, data, and operating conditions and it becomes easier to monitor the compressor.

TREND GRAPHIC

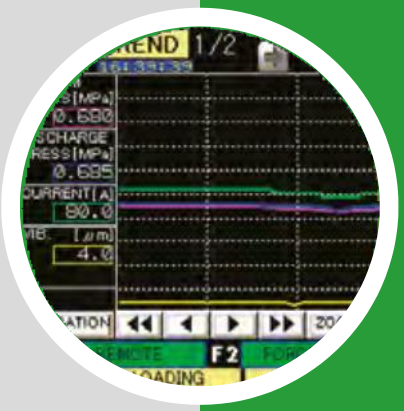
- The control panel provides a graphical interface that allows operators to view the main trends to maintain maximum operating conditions and help to plan maintenance routines.

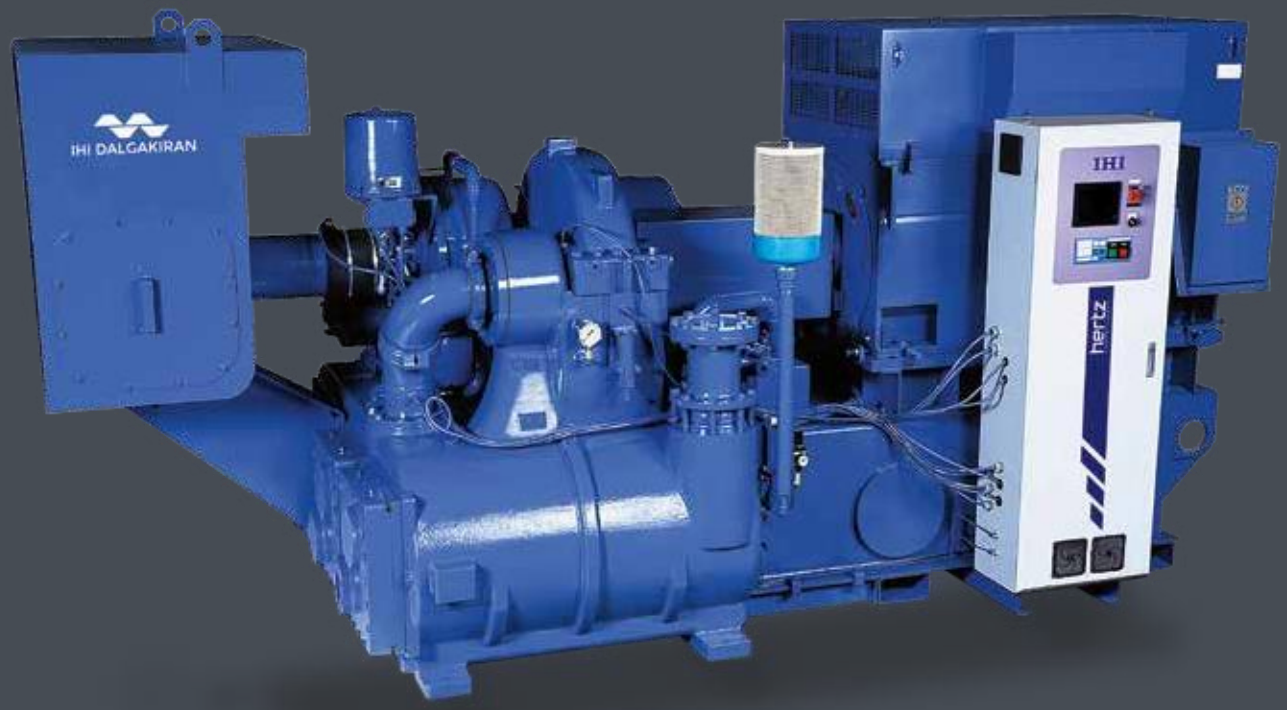
WARNING RECORD SYSTEM

- All values measured by the controller are stored in its memory in case of any warning or error. Thus, an error or a fault is detected and resolved by quickly and easily.

CAUSES AND PRECAUTIONS

- In the event of an error, operator may see faults and possible precautions from the control panel display.

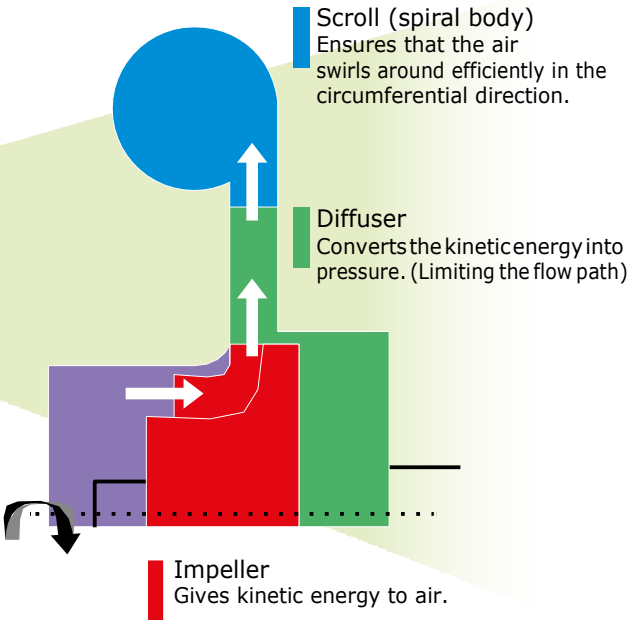




OPERATING PRINCIPLE OF THE TURBO COMPRESSOR

Turbo compressors are the type of compressors that provide kinetic energy to the air or gases by the centrifugal force generated by the impellers and convert this kinetic energy into pressure energy in the diffuser by reducing the air flow path.

Pressurized air is cooled before entering the next stage with high performance coolers. This results in higher productivity.

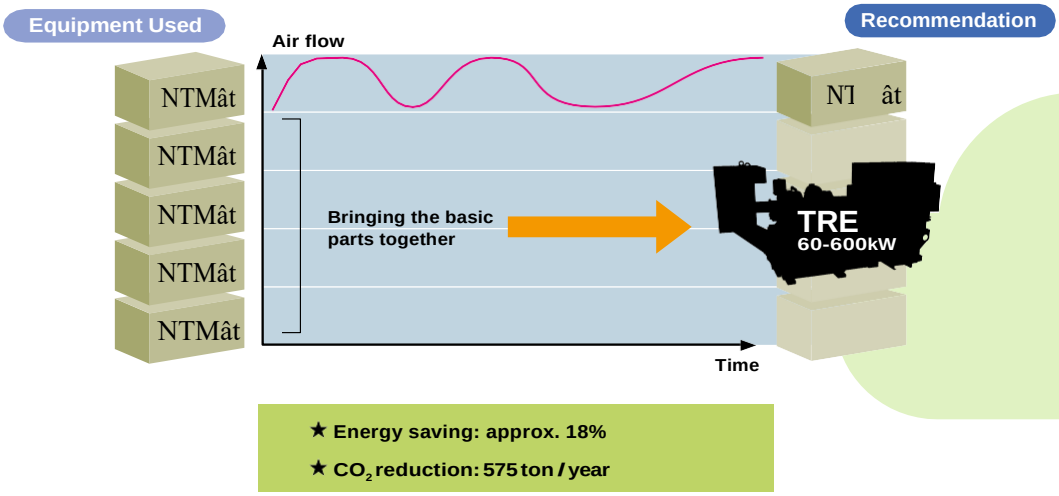


ENERGY EFFICIENCY

SELECTION OF BASIC LOAD MACHINE

Combination, the case where small and medium-sized compressors are used together with a small amount of air flow fluctuation:

Ex. it is used with one TRE60-600kW compressor is used instead of four oil-free class compressors.



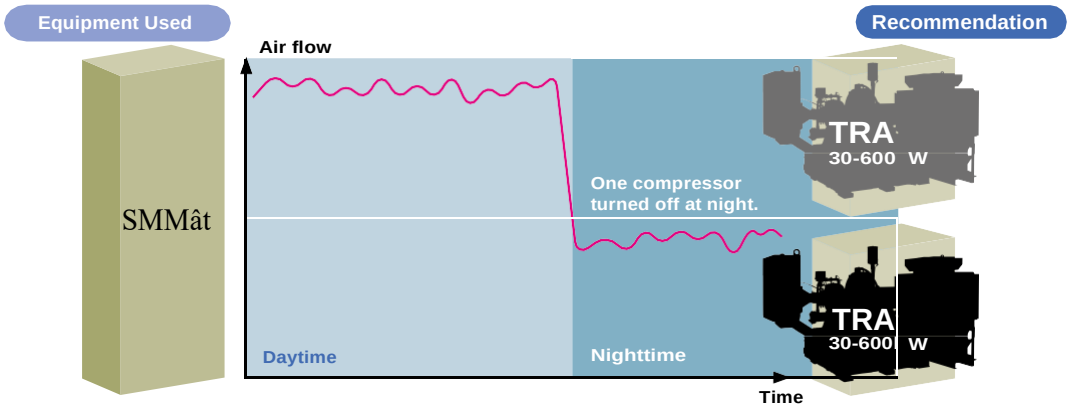
★ Energy saving: approx. 18%

★ CO_2 reduction: 575 ton / year

Carbon dioxide emission coefficient: 0.000555t CO_2 / kWh

Optimization, the case where a large and powerful compressor is used with a large amount of air flow fluctuation:

Ex. Using two TRA30-300kW compressors instead of an 600kW compressor that operates with a load of 45% at night



★ Energy saving at night: approx. 14 %

★ CO2 reduction at night: 107 ton / year

Carbon dioxide emission coefficient: 0.000555t CO_2 / kWh

Remark: Annual average operating time is taken as 8000 hours.

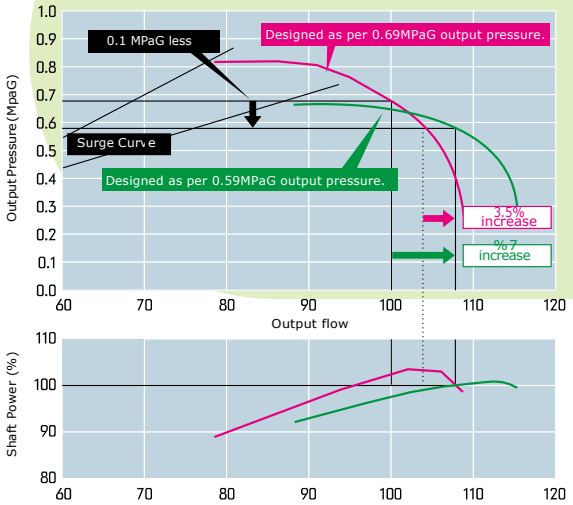
OPTIMAL PRESSURE

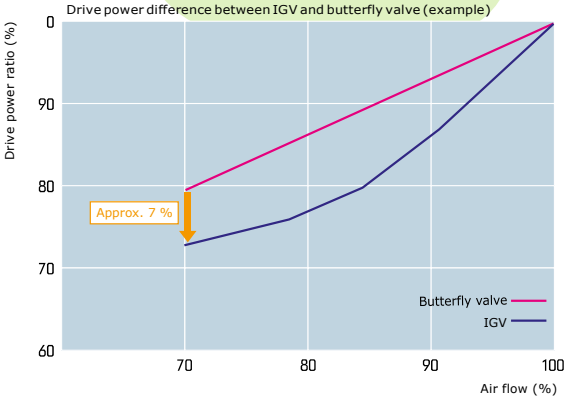
Hertz Kompressoren turbo compressors meet a wide range of pressure requirements.

Output pressure 0.69MPaG (red curve in the figure on the right)
Output pressure 0.59MPaG (green curve in the figure on the right)

Result of the comparison of Case 1 and Case 2: *The flow rate is increased by approximately 3.5%.*

Flow rate is increased *about 7% at the same shaft powers.*



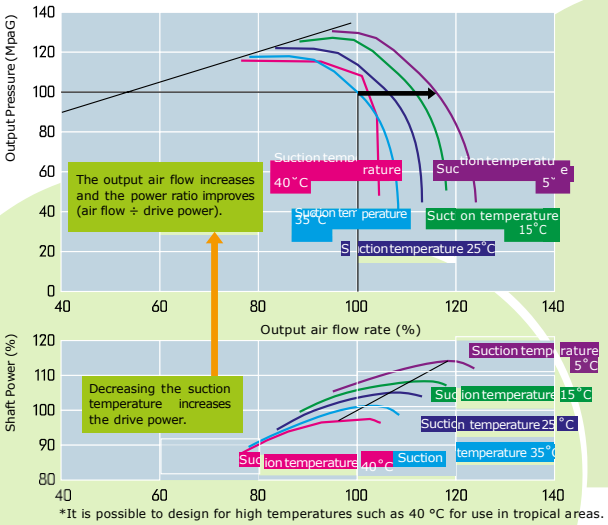


Selection of the control system (IGV's effect on energy saving)

Compressor intake valve (IGV) is angularly moved to reduce the air flow through the impeller. The fact that pressure drops are caused while reducing the flow rate when a butterfly valve is used shows us that the use of IGV is a more effective solution. If the output air flow rate remains constant, dynamic force shall remain at a low level, too.

Selection of Air Suction Temperature

Hertz Kompressoren turbo compressors are designed for severe summer conditions where the ambient temperature is 35 °C and the relative humidity is 80%. Reducing the temperature and the humidity improves the drive power ratio. As a result, the use of external cold air shall save energy.



*If the output flow rate exceeds the maximum capacity, motor overload protection function shall prevent intake of air.

*It is possible to design for high temperatures such as 40 °C for use in tropical areas.

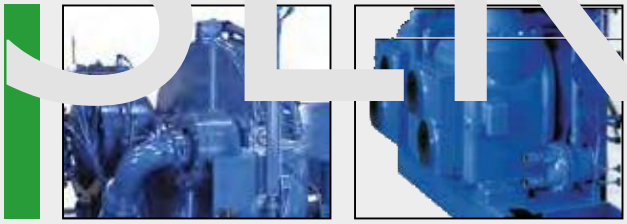
TURBO
Air Compressors

Turbo compressors represent the latest technology achieved in the production of industrial air compressors.

The wide range of products offered in terms of capacity and pressure is beyond any competitors and the return on investment times are realized below the average of the industry as very beneficial results in terms of energy efficiency are achieved.

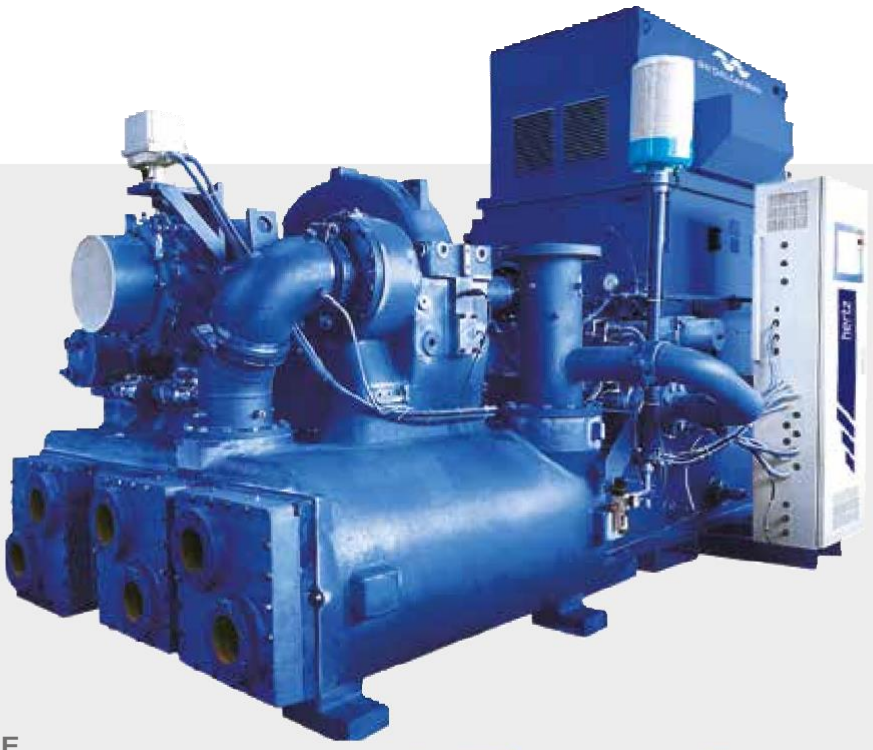
SUPERIOR TECHNOLOGY

- The use of advanced turbo machine technology provides first class energy efficiency. Hertz Kompressoren meets stringent energy saving requirements we encounter today with its turbo compressors that offer high level of energy saving.



SINGLE PIECE CAST BODY

The gear box and air coolers are cast in a single piece, and they have a compact and durable structure. Compressor unit and air ducts are surrounded by a thick and unwelded wall, and this structure is very effective for reducing noise.



EASY MAINTENANCE

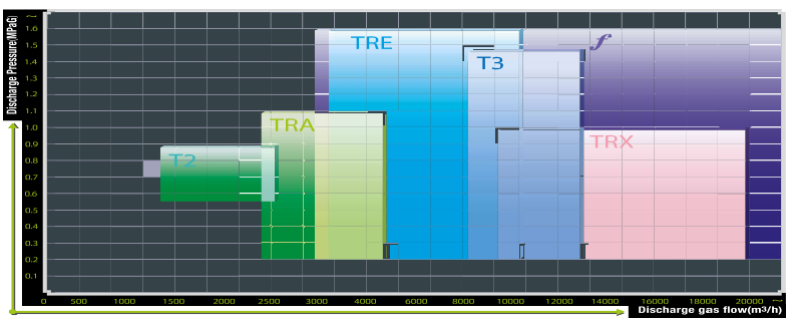
- Hertz Kompressoren turbo compressors are designed and manufactured to be simple and durable in order to reduce maintenance costs. Working hard to simplify maintenance procedures, Hertz Kompressoren has made it possible to provide stable pressurized air for years with minimal maintenance costs.

TECHNICAL DATA

MODEL	COMPRESSOR STAGE NUMBER	OUTPUT MAINTENANCE INTERVAL (Bar)	MOTOR (kW)	COMPRESSOR FLOW RATE RANGE (m^3/h)
T2A	2	5.5-8.8	125	1,394
			230	2,648
TRA 20	2-3	2-11	250	2,470
TRA 50			500	5,100
TRE 30	2-3-4	2-16	375	3,000
TRE 100E			1060	11,000
T3A 50	2-3	2-14	900	3,600
T3A 140			1,420	15,000
TRX 70	2-3	2-10	710	9,000
TRX 180			1,850	21,000

NOTES

1. Tables above indicate the flow rate in typical output pressures.
2. The flow rates were determined with reference to the following suction conditions.
3. Reference conditions:
   - Atmospheric pressure: 0.1013MPa (abs.)
   - Suction pressure: 0.0993MPa (abs.)
   - Suction temperature: 35°C
   - Relative humidity: 80 %
   - Cold water inlet temperature: 35°C



ENERGY RECOVERY SYSTEMS

After 2000 hours of fuel oil saving

MODEL	Motor Power (Kw)	Available Heat Via Recovery	Up to 70 °C			How much fuel oil can we save?		
			water flow for = 50 °C (m^3/hour)	water flow for = 30 °C (m^3/hour)	water flow for = 10 °C (m^3/hour)	Fuel Oil (liters)	CO2 emission (m^3)	Savings € (for 2000 hrs/ year)
HSC 15	15.0	11.25	0.19	0.32	0.97	2535	6914	2,206 €
HSC 18,5	18.5	13.875	0.24	0.40	1.19	3127	8527	2,720 €
HSC 22	22.0	16.5	0.28	0.47	1.42	3718	10140	3,235 €
HSC 30	30.0	22.5	0.39	0.64	1.94	5070	13827	4,411 €
HSC 30B	30.0	22.5	0.39	0.64	1.94	5070	13827	4,411 €
HSC 37	37.0	27.75	0.48	0.79	2.39	6254	17054	5,441 €
HSC 45	45.0	33.75	0.58	0.97	2.90	7606	20741	6,617 €
HSC 45B	45.0	33.75	0.58	0.97	2.90	7606	20741	6,617 €
HSC 55	55.0	41.25	0.71	1.18	3.55	9296	25350	8,087 €
HSC 75	75.0	56.25	0.97	1.61	4.84	12676	34568	11,028 €
HSC 75B	75.0	56.25	0.97	1.61	4.84	12676	34568	11,028 €
HSC 90	90.0	67.5	1.16	1.93	5.81	15211	41482	13,234 €
HSC 110	110.0	82.5	1.42	2.36	7.10	18592	50700	16,175 €
HSC 132	132.0	99	1.70	2.83	8.51	22310	60840	19,410 €
HSC 160	160.0	120	2.06	3.43	10.32	27043	73745	23,527 €
HSC 200	200.0	150	2.58	4.29	12.90	33803	92181	29,409 €
HSC 250	250.0	187.5	3.23	5.36	16.13	42254	115227	36,761 €
HSC315	315.0	236.25	4.06	6.76	20.32	53240	145186	46,319 €

After 2000 hours of natural gas saving

MODEL	Motor Power (Kw)	Available Heat Via Recovery	Up to 70 °C			How much natural gas can we save?		
			water flow for = 50 °C (m^3/hour)	water flow for = 30 °C (m^3/hour)	water flow for = 10 °C (m^3/hour)	Natural gas (m^3)	CO2 emission (m^3)	Savings in € (for 2000 hrs/year)
HSC 15	15.0	11.25	0.19	0.32	0.97	2143	5844	771 €
HSC 18,5	18.5	13.875	0.24	0.40	1.19	2643	7207	951 €
HSC 22	22.0	16.5	0.28	0.47	1.42	3143	8571	1,131 €
HSC 30	30.0	22.5	0.39	0.64	1.94	4286	11687	1,543 €
HSC 30B	30.0	22.5	0.39	0.64	1.94	4286	11687	1,543 €
HSC 37	37.0	27.75	0.48	0.79	2.39	5286	14414	1,903 €
HSC 45	45.0	33.75	0.58	0.97	2.90	6429	17531	2,314 €
HSC 45B	45.0	33.75	0.58	0.97	2.90	6429	17531	2,314 €
HSC 55	55.0	41.25	0.71	1.18	3.55	7857	21426	2,829 €
HSC 75	75.0	56.25	0.97	1.61	4.84	10714	29218	3,857 €
HSC 75B	75.0	56.25	0.97	1.61	4.84	10714	29218	3,857 €
HSC 90	90.0	67.5	1.16	1.93	5.81	12857	35061	4,629 €
HSC 110	110.0	82.5	1.42	2.36	7.10	15714	42853	5,657 €
HSC 132	132.0	99	1.70	2.83	8.51	18857	51423	6,789 €
HSC 160	160.0	120	2.06	3.43	10.32	22857	62331	8,229 €
HSC 200	200.0	150	2.58	4.29	12.90	28571	77914	10,286 €
HSC 250	250.0	187.5	3.23	5.36	16.13	35714	97393	12,857 €
HSC315	315.0	236.25	4.06	6.76	20.32	45000	122715	16,200 €

After 2000 hours of electricity saving

MODEL	Motor Power (Kw)	Available Heat Via Recovery	Up to 70 °C			How much electricity can we save?	
			water flow for = 50 °C (m^3/hour)	water flow for = 30 °C (m^3/hour)	water flow for = 10 °C (m^3/hour)	Electricity (Kw/h)	Savings in € (for 2000 hrs/year)
HSC 15	15.0	11.25	0.19	0.32	0.97	11,25	1575 €
HSC 18,5	18.5	13.875	0.24	0.40	1.19	13,88	1942,5 €
HSC 22	22.0	16.5	0.28	0.47	1.42	16,50	2310 €
HSC 30	30.0	22.5	0.39	0.64	1.94	22,50	3150 €
HSC 30B	30.0	22.5	0.39	0.64	1.94	22,50	3150 €
HSC 37	37.0	27.75	0.48	0.79	2.39	27,75	3885 €
HSC 45	45.0	33.75	0.58	0.97	2.90	33,75	4725 €
HSC 45B	45.0	33.75	0.58	0.97	2.90	33,75	4725 €
HSC 55	55.0	41.25	0.71	1.18	3.55	41,25	5775 €
HSC 75	75.0	56.25	0.97	1.61	4.84	56,25	7875 €
HSC 75B	75.0	56.25	0.97	1.61	4.84	56,25	7875 €
HSC 90	90.0	67.5	1.16	1.93	5.81	67,50	9450 €
HSC 110	110.0	82.5	1.42	2.36	7.10	82,50	11550 €
HSC 132	132.0	99	1.70	2.83	8.51	99,00	13860 €
HSC 160	160.0	120	2.06	3.43	10.32	120,00	16800 €
HSC 200	200.0	150	2.58	4.29	12.90	150,00	21000 €
HSC 250	250.0	187.5	3.23	5.36	16.13	187,50	26250 €
HSC315	315.0	236.25	4.06	6.76	20.32	236,25	33075 €

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