

# SARMAK PRODUCT CATALOGUE —

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## **ABOUT SARMAK...**

**SARMAK** IS THE REALIZATION OF AN INDUSTRIALISM DREAM FOR AN IDEALIST, ENTREPRENEUR AND YOUNG ENGINEER EDUCATED IN GERMANY. WITH THE KNOWLEDGE AND EXPERIENCE GAINED IN GERMANY, TURGAY SARACOGLU BECAME A MACHINERY MANUFACTURER IN HIS HOMETOWN. SINCE 1975, THE PRODUCTION FACILITY GREW WITH INCREASING EMPLOYMENT TO THIS DAY.

OUR DIFFERENCE IS THAT WE CONTINUE TO MANUFACTURE THE BEST MACHINE WITH TENACITY AND PASSION BY ETHICAL PRINCIPLES. INTEGRITY, SINCERITY AND FAIRNESS ARE THE COMMON VALUES FOR OUR EMPLOYEES. STABILITY BASED ON TRUST IS THE DETERMINING FACTOR FOR OUR CUSTOMERS AND SUPPLIERS.

ALTHOUGH WE ARE A MACHINERY MANUFACTURER FOR MORE THAN 40 YEARS, WE ARE ALSO AN ENGINEERING, CONSULTING AND SERVICE COMPANY. WE IDENTIFY THE NEEDS OF THE CUSTOMERS CORRECTLY, ACT QUICKLY AND CAREFULLY DURING SALES & AFTERSALES. ADDITIONALLY, WE BENEFIT FROM HIGH TECHNOLOGY EFFICIENTLY AND THUS RENEW OURSELVES CONTINUOUSLY.

OUR CORPORATE EXISTENCE AND PHILOSOPHY DEPEND ON CONTRIBUTING TO THE SUCCESS OF OUR CUSTOMERS BY MAKING THEIR LIVES EASIER. CONSEQUENTLY, OUR GOAL IS ALWAYS TO REMAIN TRUSTWORTHY AND RESPECTABLE.



1956



**GERMANY,  
THE BEGINNING  
OF DREAMS**

**TURGAY SARACOĞLU**  
STUTT GART TECHNICAL  
UNIVERSITY

1969

TUSAR ENGINEERING COMPANY IS FOUNDED BY MECHANICAL ENGINEER TURGAY SARACOGLU. FIELD OF BUSINESS ACTIVITY INCLUDED HEATING, VENTILATING & AIR CONDITIONING PROJECTS.

1975



SARMAK IS FOUNDED BY MECHANICAL ENGINEER TURGAY SARACOGLU AND TEXTILE ENGINEER KEMAL SARACOGLU IN ADANA. THE COMPANY STARTED PRODUCTION OF BOILERS AND PISTON TYPE WATER PUMPS FOR THE FIRST FIVE YEARS OF EXISTENCE.

1980



**FIRST PISTON  
COMPRESSOR  
PRODUCTION**

1985



**ESTABLISHMENT OF  
ISTANBUL BRANCH OFFICE**

AUTHORIZED DISTRIBUTOR AGREEMENT FOR SCREW AIR COMPRESSORS WAS SIGNED WITH MANNESMANN DEMAG DRUCKLUFTTECHNIK OF GERMANY.

1987



**ESTABLISHMENT OF  
ANKARA BRANCH OFFICE**

(TURGAY SARACOGLU AND KEMAL SARACOGLU)

1988



**LICENCE AGREEMENT  
WITH MANNESMANN  
DEMAG**

**FIRST SCREW AIR  
COMPRESSOR  
PRODUCTION**

1990



**FIRST EXPORT**

AGREEMENT WITH ITALIAN SUPPLIERS FOR COMPRESSED AIR DRYERS AND FILTERS.

1995



**20TH ANNIVERSARY**

1997



ASLI SARACOGLU OZER JOINED THE COMPANY AS SECOND GENERATION.

1998



NEW INVESTMENT IN ADANA ORGANIZED INDUSTRIAL ZONE.

2000



QUALITY ASSURANCE SYSTEM (ISO 9001) AND CE CERTIFICATE ARE CERTIFIED BY TÜV SÜD TKG. OTHER CERTIFICATES INCLUDE TURKISH STANDARDS (TSEK, TSE) AND RUSSIAN STANDARD (GOST-R).

2004

**ESTABLISHMENT OF BURSA SERVICE CENTER**

2006

**ESTABLISHMENT OF KAYSERI SERVICE CENTER**

2007



MURAT SARACOGLU JOINED THE COMPANY AS SECOND GENERATION.

2008



THE NEW PRODUCTION FACILITY WAS OPENED IN ADANA ORGANIZED INDUSTRIAL ZONE.

2011

**ESTABLISHMENT OF DENIZLI SERVICE CENTER**

2013

**"AGIAD (YOUNG BUSINESSMEN ASSOCIATION) BRAND OF THE YEAR AWARD" FOR RENEWED BRANDING.**



**SARMAK**  
COMPRESSORS + ENGINEERING

# SARMAK SCREW COMPRESSORS –

## AIR COMPRESSORS (OIL LUBRICATED)

(5,5 kW - 250 kW)

### WIDE RANGE SOLUTION FOR ALL APPLICATIONS

TECHNOLOGY TO MEET ALL YOUR DEMANDS.

### FEATURES AND ADVANTAGES OF THE SYSTEM

#### SMART DESIGN

THE LEAN DESIGN DEVELOPED BY OUR ENGINEERING TEAM PROVIDES MORE PRACTICAL MAINTENANCE.

#### WIDE RANGE OF SCREW BLOCKS

WE USE THE MOST CONVENIENT SCREW BLOCKS TO SUIT THE ELECTRIC MOTOR REVOLUTION RANGES. THEREFORE, YOU CAN BENEFIT THE OPTIMUM EFFICIENCY FOR LONG YEARS OF OPERATION.

#### AUTOMATIC BELT TENSIONING DRIVE SYSTEM

INTEGRATED TO ALL SARMAK SCREW COMPRESSOR MODELS, POWER IS EFFICIENTLY TRANSMITTED.

#### ELECTRONIC CONTROL / COMMAND SYSTEM WITH MICROPROCESSOR

SMART TECHNOLOGY DISPLAYS ALL ERRORS & ALARMS AND PERIODIC MAINTENANCE INTERVALS OF THE SYSTEM.

#### ROBUST CANOPY

MORE SILENT AND BALANCED OPERATION BY SOUND AND VIBRATION ISOLATION.

#### AIR & OIL COOLING SYSTEM

WIDE SURFACE AREA AND OPTIMUM WIDTH ARE THE ADVANTAGES. CONSEQUENTLY, LOW TEMPERATURE AND PRESSURE DROP MEAN LONG COMPRESSOR LIFE.



# SMART FD —

(5,5 kW - 22 kW)

## PRACTICAL AND COMPACT SOLUTIONS

IDEAL COMPRESSOR FOR THOSE WHO EXPECT "MORE JOB FROM A SMALLER SPACE".



## INTEGRATED EQUIPMENTS

### COMPRESSED AIR PRE-FILTER

INTEGRATED FILTER HELPS TO REDUCE THE DRYER'S LOAD.

### COMPRESSED AIR DRYER

SUITABLE SOLUTION FOR COMPRESSOR CAPACITY TO PROVIDE QUALITY COMPRESSED AIR.

### RESERVOIR TANK

EXTRA HELP FOR FLUCTUATIONS IN THE COMPRESSED AIR DEMAND.

- 3 PHASE/50HZ/380V ELECTRIC MOTOR
- SELTRONIK CONTROL/COMMAND MODULE
- INLET AIR FILTER AND SUCTION REGULATOR
- SAFETY VALVE
- MINIMUM PRESSURE CHECKVALVE
- FACTORY FILLED OIL





## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery at Max. Pressure (m <sup>3</sup> /min) - (cfm)	Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Reservoir Tank Capacity (lt)	Compressed Air Connection (Ball Valve)	Dimensions			Total Weight (kg)
								Length (mm)	Width (mm)	Height (mm)	
SMART 85 FD	0,90 - 31,8	7,5 - 108,7	5,5 - 7,5	3.000	67	500	R3/4"	2.000	700	1.520	420
SMART 86 FD	0,70 - 24,7	10 - 145	5,5 - 7,5	3.000	67	500	R3/4"	2.000	700	1.520	420
SMART 110 FD	1,15 - 40,6	7,5 - 108,7	7,5 - 10	3.000	67	500	R3/4"	2.000	700	1.520	425
SMART 111 FD	0,95 - 33,5	10 - 145	7,5 - 10	3.000	67	500	R3/4"	2.000	700	1.520	425
SMART 150 FD	1,70 - 60,0	7,5 - 108,7	11 - 15	3.000	67	500	R3/4"	2.000	850	1.670	510
SMART 151 FD	1,50 - 52,9	10 - 145,0	11 - 15	3.000	67	500	R3/4"	2.000	850	1.670	510
SMART 200 FD	2,30 - 81,2	7,5 - 108,7	15 - 20	3.000	68	500	R3/4"	2.000	850	1.670	520
SMART 201 FD	2,00 - 70,6	10 - 145,0	15 - 20	3.000	68	500	R3/4"	2.000	850	1.670	520
SMART 300 FD	3,20 - 113,0	7,5 - 108,7	18,5 - 25	3.000	69	750	R1"	2.100	850	1.880	640
SMART 301 FD	2,60 - 91,8	10 - 145,0	18,5 - 25	3.000	69	750	R1"	2.100	850	1.880	640
SMART 400 FD	3,65 - 128,8	7,5 - 108,7	22 - 30	3.000	71	750	R1"	2.100	850	1.880	665
SMART 401 FD	3,12 - 110,1	10 - 145,0	22 - 30	3.000	71	750	R1"	2.100	850	1.880	665

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (LT/MIN) AND SPECIFIC POWER (KW X MIN / LT) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION SMART FD SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 8,5-62 —

(5,5 kW - 37 kW)

**FIRST STEP FOR COMPANIES WITH GRAND TARGETS**

SMALL ROBOTS ARE READY FOR MISSION.



## FEATURES AND ADVANTAGES OF THE SYSTEM

- OIL INJECTED
- AIR COOLED
- HIGH PERFORMANCE SCREW BLOCK
- 3 PHASE / 50HZ / 380V ELECTRIC MOTOR
- AUTOMATIC BELT TENSIONING DRIVE SYSTEM
- ELECTRONIC CONTROL / COMMAND SYSTEM WITH MICROPROCESSOR (SELTRONIK)
  - AIR FILTER / OIL FILTER / SEPARATOR / OIL CHANGE INDICATORS
  - PERIODIC MAINTENANCE INDICATORS
  - ERRORS AND ALARMS
- INLET AIR FILTER AND SUCTION REGULATOR
- NEW HORIZONTAL DESIGN AIR / OIL SEPARATOR TANK (EXCEPT ROBOT 60)
- AIR COOLED AIR / OIL COMBICOOLER WITH WIDE SURFACE AREA
- SAFETY VALVE, MIN. PRESSURE CHECKVALVE
- FACTORY FILLED OIL
- SOUND AND VIBRATION ISOLATED, ROBUST CHASSIS AND CANOPY

# TECHNICAL SPECIFICATIONS

Model	Free Air Delivery at Max. Pressure (m <sup>3</sup> /min) - (cfm)	Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Pipe)	Dimensions			Total Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
ROBOT 8,5	0,90 - 31,8	7,5 - 108,7	5,5 - 7,5	3.000	67	R3/4"	920	690	900	187
ROBOT 8,6	0,70 - 24,7	10 - 145,0	5,5 - 7,5	3.000	67	R3/4"	920	690	900	187
ROBOT 11	1,15 - 40,6	7,5 - 108,7	7,5 - 10	3.000	67	R3/4"	920	690	900	190
ROBOT 12	0,95 - 33,5	10 - 145,0	7,5 - 10	3.000	67	R3/4"	920	690	900	190
ROBOT 15	1,70 - 60,0	7,5 - 108,7	11 - 15	3.000	67	R3/4"	950	840	1.000	256
ROBOT 16	1,50 - 52,9	10 - 145,0	11 - 15	3.000	67	R3/4"	950	840	1.000	256
ROBOT 17	1,25 - 44,1	13 - 188,5	11 - 15	3.000	67	R3/4"	950	840	1.000	256
ROBOT 20	2,30 - 81,20	7,5 - 108,7	15 - 20	3.000	68	R3/4"	1.200	840	1.000	297
ROBOT 21	2,00 - 70,6	10 - 145,0	15 - 20	3.000	68	R3/4"	1.200	840	1.000	297
ROBOT 22	1,62 - 57,2	13 - 188,5	15 - 20	3.000	68	R3/4"	1.200	840	1.000	297
ROBOT 30	3,20 - 113,0	7,5 - 108,7	18,5 - 25	3.000	69	R1"	1.000	870	1.085	355
ROBOT 31	2,60 - 91,8	10 - 145,0	18,5 - 25	3.000	69	R1"	1.000	870	1.085	355
ROBOT 32	2,30 - 81,20	13 - 188,5	18,5 - 25	3.000	69	R1"	1.000	870	1.085	355
ROBOT 40	3,65 - 128,8	7,5 - 108,7	22 - 30	3.000	71	R1"	1.000	870	1.100	367
ROBOT 41	3,12 - 110,1	10 - 145,0	22 - 30	3.000	71	R1"	1.000	870	1.100	367
ROBOT 42	2,72 - 96,0	13 - 188,5	22 - 30	3.000	71	R1"	1.000	870	1.100	367
ROBOT 50	5,00 - 176,5	7,5 - 108,7	30 - 40	3.000	70	R1 1/2"	1.400	870	1.200	510
ROBOT 51	4,25 - 150,0	10 - 145,0	30 - 40	3.000	70	R1 1/2"	1.400	870	1.200	510
ROBOT 52	3,70 - 130,6	13 - 188,5	30 - 40	3.000	70	R1 1/2"	1.400	870	1.200	510
ROBOT 60	6,00 - 211,8	7,5 - 108,7	37 - 50	3.000	72	R1 1/2"	1.250	1.020	1.150	640
ROBOT 61	5,20 - 183,6	10 - 145,0	37 - 50	3.000	72	R1 1/2"	1.250	1.020	1.150	640
ROBOT 62	4,40 - 155,3	13 - 188,5	37 - 50	3.000	72	R1 1/2"	1.250	1.020	1.150	640

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 8,5-62 SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 70-162 —

(37 kW - 90 kW)

**POPULAR MEMBER OF OUR COMPRESSOR FAMILY**

PERFECT FOR CONFIDENT, POWERFUL AND BOLD ENTERPRISES.

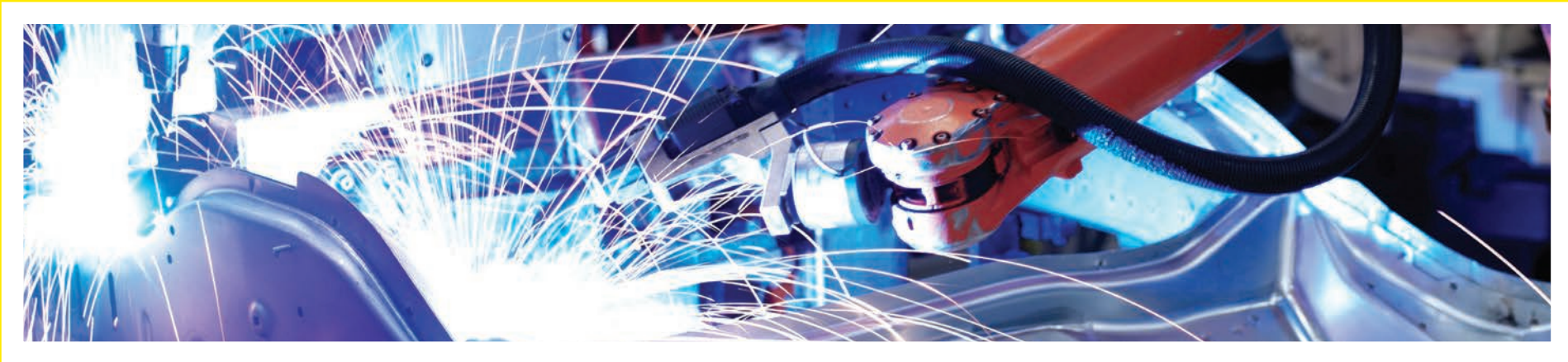


## FEATURES AND ADVANTAGES OF THE SYSTEM

### TWO CHAMBER DESIGN

THE CANOPY IS DIVIDED INTO TWO SEPARATED CHAMBERS TO LIMIT HEAT TRANSFER (SCREW BLOCK AND MOTOR VS. AIR / OIL COOLERS). THIS FEATURE ENSURES LONGER COMPRESSOR LIFE.

- 3 PHASE / 50HZ / 380V ELECTRIC MOTOR
- ELECTRONIC CONTROL / COMMAND SYSTEM WITH MICROPROCESSOR (SELTRONIK)
- AIR INLET FILTER AND SUCTION REGULATOR
- SAFETY VALVE
- MINIMUM PRESSURE CHECKVALVE
- FACTORY FILLED OIL
- SOUND AND VIBRATION ISOLATED, ROBUST CHASSIS AND CANOPY



## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery at Max. Pressure (m <sup>3</sup> /min) - (cfm)	Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
ROBOT 70	7,10 - 250,7	7,5 - 108,7	37 - 50	3.000	70	DN50-PN16	2.020	1.200	1.490	1.120
ROBOT 71	5,84 - 206,2	10 - 145,0	37 - 50	3.000	70	DN50-PN16	2.020	1.200	1.490	1.120
ROBOT 72	5,12 - 180,8	13 - 188,5	37 - 50	3.000	70	DN50-PN16	2.020	1.200	1.490	1.120
ROBOT 85	8,20 - 289,5	7,5 - 108,7	45 - 60	3.000	71	DN50-PN16	2.020	1.200	1.490	1.340
ROBOT 86	7,10 - 250,7	10 - 145,0	45 - 60	3.000	71	DN50-PN16	2.020	1.200	1.490	1.340
ROBOT 87	5,70 - 201,2	13 - 188,5	45 - 60	3.000	71	DN50-PN16	2.020	1.200	1.490	1.340
ROBOT 100	10,00 - 353,14	7,5 - 108,7	55 - 75	3.000	73	DN50-PN16	2.020	1.200	1.490	1.390
ROBOT 101	8,90 - 314,3	10 - 145,0	55 - 75	3.000	73	DN50-PN16	2.020	1.200	1.490	1.390
ROBOT 102	7,40 - 261,3	13 - 188,5	55 - 75	3.000	73	DN50-PN16	2.020	1.200	1.490	1.390
ROBOT 140	13,60 - 480,2	7,5 - 108,7	75 - 100	3.000	75	DN50-PN16	2.200	1.400	1.700	1.720
ROBOT 141	12,44 - 439,3	10 - 145,0	75 - 100	3.000	75	DN50-PN16	2.200	1.400	1.700	1.720
ROBOT 142	10,43 - 368,3	13 - 188,5	75 - 100	3.000	75	DN50-PN16	2.200	1.400	1.700	1.720
ROBOT 160	15,40 - 543,8	7,5 - 108,7	90 - 125	3.000	75	DN50-PN16	2.200	1.400	1.700	1.790
ROBOT 161	14,30 - 504,9	10 - 145,0	90 - 125	3.000	75	DN50-PN16	2.200	1.400	1.700	1.790
ROBOT 162	12,60 - 444,9	13 - 188,5	90 - 125	3.000	75	DN50-PN16	2.200	1.400	1.700	1.790

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 N0RMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 70-162 SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 180-262 \_

(90 kW - 160 kW)

**SUITABLE CHOICE FOR YOU TO FOCUS ON YOUR WORK**

LET IT HANDLE THE COMPRESSED AIR; SO THAT YOU CAN FOCUS ON YOUR GROWTH.



## **SCREW BLOCK**

TROUBLE FREE "AUTOMATIC BELT-TENSIONING DRIVE SYSTEM".  
**FAIL SAFE SYSTEM-FSS:** SPECIALLY DESIGNED "SHAFT SEAL SYSTEM" FOR ELIMINATION OF OIL LEAKAGES FROM THE BLOCK HOUSING.

## **INTEGRATED DESIGN**

OIL FILTER AND THERMOSTATIC BYPASS VALVE ARE INTEGRATED TO THE SCREW BLOCK. THIS MODULAR CONCEPT DESIGN MAKES THE SCREW BLOCK MORE COMPACT AND EASIER TO MAINTAIN.

## **SWITCH CABINET**

THE CABINET HOUSING IS ACCORDING TO IP 55 PROTECTION. COMPONENTS ARE ACCORDING TO STANDARD DIN/EN 60204-1. IT IS INTEGRATED INTO THE CANOPY, EASY TO USE AND MAINTAIN.

## **CONTENTS OF SWITCH CABINET**

STAR-DELTA CONTACTOR COMBINATION, FAN CONTACTOR, MOTOR PROTECTION SWITCH AND FUSES, POWER SOURCE (24V), EMERGENCY STOP SWITCH, ON / OFF BUTTON, CONTROL BOARD [CPU LCD DIGITAL DISPLAY].

### ELECTRIC MOTOR

CAPABILITY TO DRIVE THE SCREW VIA V-BELT.

STAR-DELTA DRIVING MODE.

90 KW (125 HP) THRU 160 KW (220 HP) POWER RANGE.

T.E.F.C, INDUCTION, ALTERNATIVE CURRENT (AC) , LOW VOLTAGE (LV), WITH FOOT, CAST IRON INDUSTRIAL TYPE.

ENCLOSURE CLASS IP55 AND INSULATION CLASS F.

3 PHASE, 50 HZ, 380 V, AND 2-POLE 3000 RPM.

### ELECTRONIC CONTROL SYSTEM

"SELTRONIK MICROPROCESSOR ELECTRONIC CONTROL SYSTEM".

SYSTEM PROTECTS THE COMPRESSOR UNIT (FAULT DETECTION).

DISPLAY OF SERVICE PERIODS AND STATUS INDICATION.

ALL OPERATIONAL CONTROL PARAMETERS.

RS485 COMMUNICATION PORT.

CLEARLY-ARRANGED CUSTOM BACKLIT LCD DIGITAL DISPLAY.

### MOUNTING AND CANOPY

STRONG AND VIBRATION-INSULATED CHASSIS AND CANOPY.

SIDE PANELS ALLOW FOR MAINTENANCE AND SERVICE WORK.

FIRE AND SOUND RESISTANT FOAM RUBBER LAYERS INSIDE PANELS.

SUITABLE FOR AIR DUCT ADDITIONS; INLET AND DISCHARGE.

### TWO-CHAMBER DESIGN

THE CANOPY DIVIDED INTO HOT CHAMBER (COOLER SIDE) AND

COLD CHAMBER (SCREW BLOCK SIDE) FOR MORE EFFICIENT

COOLING; THUS LOW SYSTEM TEMPERATURE AND COMPRESSED AIR TEMPERATURES.

NOISE LEVELS ACCORDING TO CAGI PNEUROP PN8NTC2 STANDARDS.

### FILTRATION

HIGHLY EFFICIENT AIR INTAKE, OIL AND SEPARATOR FILTERS WITH WIDE SURFACE AREA; SPECIALLY DESIGNED TO COMPRESSORS.

99.9 % FILTRATION CAPACITY.

### OIL CIRCUIT

TO ENSURE THE HIGHEST PERFORMANCE AND LONGER

COMPONENT LIFE: SEMI-SYNTHETIC COMPRESSOR OIL.

INTEGRATED THERMOSTATIC BYPASS VALVE AND OIL FILTER.

OPTIMUM VOLUME OF OIL IN THE CIRCULATION SYSTEM.

STEEL CONNECTIONS.

HIGH INTEGRATION OF LINKAGES FOR MINIMUM COMPONENT NUMBER.

CORROSION-PROTECTED, MULTI-STAGED AIR/OIL SEPARATOR TANK.

### COOLING AND VENTILATION

COOLING FANS MOUNTED ON UNIT'S CEILING.

LARGELY DIMENSIONED, LIGHTWEIGHT ALUMINIUM OIL/AIR COOLERS WITH EXTENDED SURFACE AREA INCORPORATED INTO CANOPY.

SUITABLE FOR OPERATING UNDER HEAVY-DUTY CONDITIONS.

### UNIT COLOR

RAL 5001 GREEN BLUE.

## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery at Max. Pressure (m <sup>3</sup> /min) - (cfm)	Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
ROBOT 180	17,45 - 616,2	7,5 - 108,7	90 - 125	3.000	77	DN80-PN16	2.550	1.750	1.890	2.440
ROBOT 181	15,47 - 546,3	10 - 145,0	90 - 125	3.000	77	DN80-PN16	2.550	1.750	1.890	2.440
ROBOT 182	13,45 - 474,9	13 - 188,5	90 - 125	3.000	77	DN80-PN16	2.550	1.750	1.890	2.440
ROBOT 210	20,77 - 733,5	7,5 - 108,7	110 - 150	3.000	77	DN80-PN16	2.550	1.750	1.890	2.840
ROBOT 211	18,63 - 657,9	10 - 145,0	110 - 150	3.000	77	DN80-PN16	2.550	1.750	1.890	2.840
ROBOT 212	16,21 - 572,4	13 - 188,5	110 - 150	3.000	77	DN80-PN16	2.550	1.750	1.890	2.840
ROBOT 230	22,87 - 807,6	7,5 - 108,7	132 - 180	3.000	78	DN80-PN16	2.550	1.750	1.890	2.900
ROBOT 231	20,10 - 709,0	10 - 145,0	132 - 180	3.000	78	DN80-PN16	2.550	1.750	1.890	2.900
ROBOT 232	17,45 - 616,0	13 - 188,5	132 - 180	3.000	78	DN80-PN16	2.550	1.750	1.890	2.900
ROBOT 260	25,00 - 882,8	7,5 - 108,7	160 - 220	1.500	78	DN100-PN16	2.550	1.750	1.890	3.000
ROBOT 261	21,00 - 741,6	10 - 145,0	160 - 220	1.500	78	DN100-PN16	2.550	1.750	1.890	3.000
ROBOT 262	18,60 - 656,8	13 - 188,5	160 - 220	1.500	78	DN100-PN16	2.550	1.750	1.890	3.000

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 180-262 SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 250-432 –

(132 kW - 250 kW)

## RIGHT SOLUTIONS FOR LARGE FACILITIES

THE MOST PROFESSIONAL PLAYER IN ITS CLASS IS ON THE FIELD.

### AIR COOLER WITH WIDE SURFACE AREA & OPTIMUM WIDTH:

Ensures low system operating temperatures and low discharge temperatures. Maintenance and general service are convenient. It also takes the load off from the downstream equipments (i.e. air dryer) placed after the compressor.

### OIL COOLER WITH WIDE SURFACE AREA & OPTIMUM WIDTH:

Lowers system temperature, thus lengthens the life of parts such as oil and oil filter/seal. It also minimizes pressure drop and increases overall efficiency.

### ROBUST CHASSIS:

Integrated to the compressor unit, it is designed in optimum dimensions for the overall canopy. There's no need for special foundation at operating site.

### "TWO-CHAMBER PRINCIPLE":

Compressor unit has been divided into "Hot-Chamber" (Cooler Side) and "Cold Chamber" (Screw block side) for better and more efficient cooling. As a result, system temperature and consequently compressed air discharge temperature are reduced much easily.

### THERMOSTATICALLY CONTROLLED COOLING FAN:

Discharges the heat within the canopy via high absorbing capability. Thermostatic control ensures optimum temperatures.

### INTEGRATED SMART CONTROL SYSTEM:

User-friendly electronic control/command system with microprocessor with the capability to display all necessary parameters (i.e. maintenance periods, error logs etc.) for efficient operation.

### LOW MAINTENANCE COSTS:

Compressor unit's design is suitable for low-cost operation and maintenance. All the components & parts are uniquely selected for long-term perspective. Toleranced Air Inlet Filter, Oil Filter and Separator ensure that the compressed air discharge is up to the highest standards. Also, there is optimum available space for maintenance/general service work which eliminates downtime and costs.

### HIGH PERFORMANCE SEPARATOR FILTER:

Multi-stage filtration system assures excellent compressed air discharge. (< 3 ppm oil content)

### LOW SOUND LEVELS:

Optimum sound isolation and compressor unit's design is a perfect combination.

### HIGH QUALITY SCREW BLOCK:

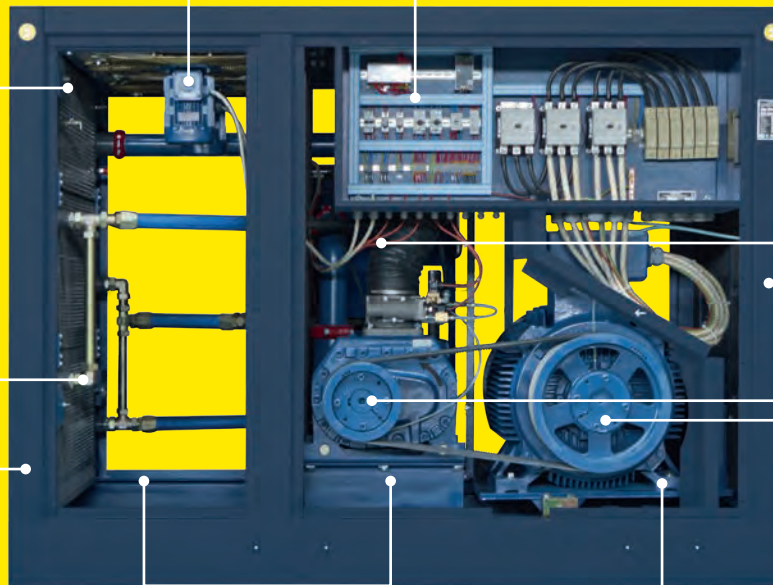
Low speed, highly efficient & reliable screw block lowers energy consumption.

### AUTOMATIC BELT-TENSIONING DRIVE SYSTEM:

A reliable mechanism for the transmission from electric motor shaft to airend shaft via V-Belt. Energy loss or slip is eliminated.

### ELECTRIC MOTOR:

132 kW (180 HP) thru 250 kW (340 HP) range electric motors are the continuous power houses in ROBOT 250-432 series.







## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery at Max. Pressure (m <sup>3</sup> /min) - (cfm)	Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
<b>ROBOT 250</b>	24,70 - 872,3	7,5 - 108,7	132 - 180	1.500	78	DN100-PN16	2.850	1.950	2.140	4.750
<b>ROBOT 251</b>	21,50 - 759,3	10 - 145,0	132 - 180	1.500	78	DN100-PN16	2.850	1.950	2.140	4.750
<b>ROBOT 252</b>	18,00 - 635,6	13 - 188,5	132 - 180	1.500	78	DN100-PN16	2.850	1.950	2.140	4.750
<b>ROBOT 290</b>	30,20 - 1.066,5	7,5 - 108,7	160 - 220	1.500	78	DN100-PN16	2.850	1.950	2.140	4.900
<b>ROBOT 291</b>	26,50 - 935,8	10 - 145,0	160 - 220	1.500	78	DN100-PN16	2.850	1.950	2.140	4.900
<b>ROBOT 292</b>	22,10 - 780,4	13 - 188,5	160 - 220	1.500	78	DN100-PN16	2.850	1.950	2.140	4.900
<b>ROBOT 370</b>	36,60 - 1.291,5	7,5 - 108,7	200 - 270	1.500	79	DN100-PN16	2.850	1.950	2.140	5.000
<b>ROBOT 371</b>	31,00 - 1.094,7	10 - 145,0	200 - 270	1.500	79	DN100-PN16	2.850	1.950	2.140	5.000
<b>ROBOT 372</b>	27,20 - 960,5	13 - 188,5	200 - 270	1.500	79	DN100-PN16	2.850	1.950	2.140	5.000
<b>ROBOT 430</b>	42,70 - 1.507,9	7,5 - 108,7	250 - 340	1.500	80	DN100-PN16	2.850	1.950	2.140	5.400
<b>ROBOT 431</b>	38,00 - 1.341,9	10 - 145,0	250 - 340	1.500	80	DN100-PN16	2.850	1.950	2.140	5.400
<b>ROBOT 432</b>	33,20 - 1.172,4	13 - 188,5	250 - 340	1.500	80	DN100-PN16	2.850	1.950	2.140	5.400

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 250-432 SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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**SARMAK**

COMPRESSORS + ENGINEERING

# SARMAK VARIABLE SPEED SCREW COMPRESSORS –

## AIR COMPRESSORS (OIL LUBRICATED)

(11 kW - 250 kW)

**EFFICIENCY WITH “LESS ENERGY TO DO MORE”**

ADDITIONAL SUPPORT WITH ENERGY SAVINGS.

### FEATURES AND ADVANTAGES OF THE SYSTEM

#### **DIRECT TORQUE CONTROLLED FREQUENCY INVERTERS**

INVERTERS USED IN VARIABLE SPEED MODELS AFFECT THE ELECTRIC MOTOR'S FREQUENCY; THUS ITS SPEED ADAPTS TO THE EXACT COMPRESSED AIR DEMAND.

#### **FIXED PRESSURE VALUE**

INSTEAD OF THE COMPRESSOR RUNNING BETWEEN LOW PRESSURE-HIGH PRESSURE BAND (ON/OFF OPERATION REGIME); BY THE HELP OF THE INVERTER, THE UNIT RUNS ON A FIXED PRESSURE VALUE, THEREFORE SAVES ENERGY.

#### **LOW CURRENT**

ELECTRIC MOTOR'S CURRENT LEVEL IS LOWER AT THE START UP; THEREFORE THERE ARE LOWER LOADS ON THE MOTOR AND ELECTRIC SUPPLY SYSTEM.

#### **LONGER LIFE**

SINCE THE COMPRESSOR IS RUNNING MUCH MORE EFFICIENTLY, THE COMPONENTS WEAR LESS. ACCORDINGLY, IT MEANS LOWER COSTS.

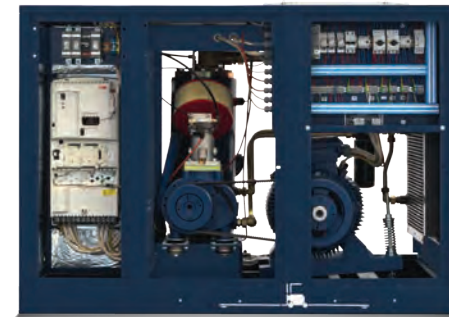


# ROBOT 15-62 DA \_

(11 kW - 37 kW)

**EFFICIENT FIRST STEP FOR COMPANIES WITH GRAND TARGETS**

ENERGY SAVER SMALL ROBOTS ARE READY FOR MISSION.



PLEASE LOOK AT PAGE 10 FOR EXPLANATIONS \_



## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery		Max. Pressure (bar)-(psi)	Nominal Motor Power (kW)-(HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Pipe)	Dimensions			Total Weight (kg)
	Min. (m <sup>3</sup> /min) - (cfm)	Max. (m <sup>3</sup> /min) - (cfm)						Length (mm)	Width (mm)	Height (mm)	
ROBOT 15 DA	0,76 - 26,8	1,70 - 60,0	7,5 - 108,7	11 - 15	3.000	67	R3/4"	1.200	840	1.000	385
ROBOT 16 DA	0,75 - 26,5	1,50 - 52,9	10 - 145,0	11 - 15	3.000	67	R3/4"	1.200	840	1.000	385
ROBOT 17 DA	0,82 - 28,9	1,25 - 44,1	13 - 188,5	11 - 15	3.000	67	R3/4"	1.200	840	1.000	385
ROBOT 20 DA	0,80 - 28,3	2,30 - 81,20	7,5 - 108,7	15 - 20	3.000	68	R3/4"	1.200	840	1.000	395
ROBOT 21 DA	0,74 - 26,1	2,00 - 70,6	10 - 145,0	15 - 20	3.000	68	R3/4"	1.200	840	1.000	395
ROBOT 22 DA	0,70 - 24,7	1,62 - 57,2	13 - 188,5	15 - 20	3.000	68	R3/4"	1.200	840	1.000	395
ROBOT 30 DA	1,71 - 60,4	3,20 - 113,0	7,5 - 108,7	18,5 - 25	3.000	70	R1"	1.350	870	1.085	490
ROBOT 31 DA	1,58 - 55,8	2,60 - 91,8	10 - 145,0	18,5 - 25	3.000	70	R1"	1.350	870	1.085	490
ROBOT 32 DA	1,51 - 53,3	2,30 - 81,20	13 - 188,5	18,5 - 25	3.000	70	R1"	1.350	870	1.085	490
ROBOT 40 DA	1,59 - 56,2	3,65 - 128,8	7,5 - 108,7	22 - 30	3.000	72	R1"	1.350	870	1.100	510
ROBOT 41 DA	1,65 - 58,3	3,12 - 110,1	10 - 145,0	22 - 30	3.000	72	R1"	1.350	870	1.100	510
ROBOT 42 DA	1,49 - 52,6	2,72 - 96,0	13 - 188,5	22 - 30	3.000	72	R1"	1.350	870	1.100	510
ROBOT 50 DA	1,61 - 56,9	5,00 - 176,5	7,5 - 108,7	30 - 40	3.000	71	R1 1/2"	1.400	870	1.200	585
ROBOT 51 DA	1,55 - 54,7	4,25 - 150,0	10 - 145,0	30 - 40	3.000	71	R1 1/2"	1.400	870	1.200	585
ROBOT 52 DA	1,42 - 50,1	3,70 - 130,6	13 - 188,5	30 - 40	3.000	71	R1 1/2"	1.400	870	1.200	585
ROBOT 60 DA	2,10 - 74,2	6,00 - 211,8	7,5 - 108,7	37 - 50	3.000	73	R1 1/2"	1.600	1.200	1.150	825
ROBOT 61 DA	2,00 - 70,6	5,20 - 183,6	10 - 145,0	37 - 50	3.000	73	R1 1/2"	1.600	1.200	1.150	825
ROBOT 62 DA	1,88 - 66,4	4,40 - 155,3	13 - 188,5	37 - 50	3.000	73	R1 1/2"	1.600	1.200	1.150	825

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 15 - 62 DA SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 70-162 DA/DAC –

(37 kW - 90 kW)

**GREEN MEMBER OF OUR COMPRESSOR FAMILY**

PERFECT FOR CONFIDENT, POWERFUL AND BOLD ENTERPRISES WHO SEEK EFFICIENCY.



PLEASE LOOK AT PAGE 12 FOR EXPLANATIONS –



## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery		Max. Pressure (bar) - (psi)	Nominal Motor Power (kW)-(HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (Kg)
	Min. (m <sup>3</sup> /min) - (cfm)	Max. (m <sup>3</sup> /min) - (cfm)						Length (mm)	Width (mm)	Height (mm)	
ROBOT 70 DA -DAC*	2,76 - 97,5	7,10 - 250,7	7,5 - 108,7	37 - 50	3.000	71	DN50-PN16	2.470	1.200	1.490	1.320
ROBOT 71 DA -DAC*	2,68 - 94,6	5,84 - 206,2	10 - 145,0	37 - 50	3.000	71	DN50-PN16	2.470	1.200	1.490	1.320
ROBOT 72 DA -DAC*	2,40 - 84,8	5,12 - 180,8	13 - 188,5	37 - 50	3.000	71	DN50-PN16	2.470	1.200	1.490	1.320
ROBOT 85 DA -DAC*	2,65 - 93,6	8,20 - 289,5	7,5 - 108,7	45 - 60	3.000	72	DN50-PN16	2.470	1.200	1.490	1.440
ROBOT 86 DA -DAC*	2,55 - 90,1	7,10 - 250,7	10 - 145,0	45 - 60	3.000	72	DN50-PN16	2.470	1.200	1.490	1.440
ROBOT 87 DA -DAC*	2,49 - 87,9	5,70 - 201,2	13 - 188,5	45 - 60	3.000	72	DN50-PN16	2.470	1.200	1.490	1.440
ROBOT 100 DA -DAC*	2,74 - 96,8	10,00 - 353,14	7,5 - 108,7	55 - 75	3.000	74	DN50-PN16	2.200 - 2470	1.400 - 1.200	1.700 - 1.490	1.620
ROBOT 101 DA -DAC*	3,10 - 109,5	8,90 - 314,3	10 - 145,0	55 - 75	3.000	74	DN50-PN16	2.200 - 2470	1.400 - 1.200	1.700 - 1.490	1.620
ROBOT 102 DA -DAC*	2,59 - 91,5	7,40 - 261,3	13 - 188,5	55 - 75	3.000	74	DN50-PN16	2.200 - 2470	1.400 - 1.200	1.700 - 1.490	1.620
ROBOT 140 DA -DAC*	3,67 - 129,6	13,60 - 480,2	7,5 - 108,7	75 - 100	3.000	76	DN50-PN16	2.514	1.400	1.700	2.000
ROBOT 141 DA -DAC*	3,73 - 131,7	12,44 - 439,3	10 - 145,0	75 - 100	3.000	76	DN50-PN16	2.514	1.400	1.700	2.000
ROBOT 142 DA -DAC*	3,75 - 132,4	10,43 - 368,3	13 - 188,5	75 - 100	3.000	76	DN50-PN16	2.514	1.400	1.700	2.000
ROBOT 160 DA	3,85 - 135,9	15,40 - 543,8	7,5 - 108,7	90 - 125	3.000	77	DN50-PN16	2.514	1.400	1.700	2.150
ROBOT 161 DA	4,14 - 146,2	14,30 - 504,9	10 - 145,0	90 - 125	3.000	77	DN50-PN16	2.514	1.400	1.700	2.150
ROBOT 162 DA	3,90 - 137,7	12,60 - 444,9	13 - 188,5	90 - 125	3.000	77	DN50-PN16	2.514	1.400	1.700	2.150

### \*DAC MODELS ARE VSD & DIRECT DRIVE (WITHOUT GEARBOX).

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 70-162 DA /DAC SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

# ROBOT 180-262 DA/DAC –

(90 kW - 160 kW)

**GREEN CHOICE FOR YOU TO FOCUS ON YOUR WORK**

LET IT HANDLE THE COMPRESSED AIR; SO THAT YOU CAN FOCUS ON YOUR EFFICIENT GROWTH.



PLEASE LOOK AT PAGE 14 FOR EXPLANATIONS –





## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery		Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (kg)
	Min. (m <sup>3</sup> /dak)-(cfm)	Maks. (m <sup>3</sup> /dak) - (cfm)						Length DA - DAC * (mm)	Width (mm)	Height (mm)	
ROBOT 180 DA - DAC*	5,93 - 209,4	17,45 - 616,2	7,5 - 108,7	90 - 125	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	2.900
ROBOT 181 DA - DAC*	5,87 - 207,3	15,47 - 546,3	10 - 145,0	90 - 125	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	2.900
ROBOT 182 DA - DAC*	5,78 - 204,1	13,45 - 474,9	13 - 188,5	90 - 125	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	2.900
ROBOT 210 DA - DAC*	5,81 - 205,2	20,77 - 733,5	7,5 - 108,7	110 - 150	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	3.020
ROBOT 211 DA - DAC*	5,77 - 203,7	18,63 - 657,9	10 - 145,0	110 - 150	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	3.020
ROBOT 212 DA - DAC*	5,83 - 205,8	16,21 - 572,4	13 - 188,5	110 - 150	3.000	78	DN80-PN16	2.850 - 3.350	1.750	1.920	3.020
ROBOT 230 DA - DAC*	5,71 - 201,6	22,87 - 807,6	7,5 - 108,7	132 - 180	3.000	79	DN80-PN16	2.850 - 3.350	1.750	1.920	3.080
ROBOT 231 DA - DAC*	5,42 - 191,4	20,10 - 709,0	10 - 145,0	132 - 180	3.000	79	DN80-PN16	2.850 - 3.350	1.750	1.920	3.080
ROBOT 232 DA - DAC*	5,40 - 190,6	17,45 - 616,0	13 - 188,5	132 - 180	3.000	79	DN80-PN16	2.850 - 3.350	1.750	1.920	3.080
ROBOT 260 DA	7,50 - 264,8	25,00 - 882,8	7,5 - 108,7	160 - 220	1.500	78	DN100-PN16	2.850	1.750	1.920	3.560
ROBOT 261 DA	7,20 - 254,2	21,00 - 741,6	10 - 145,0	160 - 220	1.500	78	DN100-PN16	2.850	1.750	1.920	3.560
ROBOT 262 DA	5,60 - 197,7	18,60 - 656,8	13 - 188,5	160 - 220	1.500	78	DN100-PN16	2.850	1.750	1.920	3.560

### \*DAC MODELS ARE VSD & DIRECT DRIVE (WITHOUT GEARBOX).

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (kW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 180 – 262 DA / DAC SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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# ROBOT 250-432 DA -

(132 kW - 250 kW)

**ENERGY SAVING SOLUTIONS FOR LARGE FACILITIES**

THE MOST PROFESSIONAL AND EFFICIENT PLAYER IN ITS CLASS IS ON THE FIELD.



PLEASE LOOK AT PAGE 16 FOR EXPLANATIONS —



## TECHNICAL SPECIFICATIONS

Model	Free Air Delivery		Max. Pressure (bar) - (psi)	Nominal Motor Power (kW) - (HP)	Nominal Motor Speed (rpm)	Sound Level from 1 mt. distance (dBA)	Compressed Air Connection (Flange)	Dimensions			Total Weight (kg)
	Min. (m <sup>3</sup> /min) - (cfm)	Max. (m <sup>3</sup> /min) - (cfm)						Length (mm)	Width (mm)	Height (mm)	
ROBOT 250 DA	10,86 - 383,5	24,70 - 872,3	7,5 - 108,7	132 - 180	1.500	78	DN100-PN16	3.300	1.950	2.140	5.075
ROBOT 251 DA	10,75 - 379,6	21,50 - 759,3	10 - 145,0	132 - 180	1.500	78	DN100-PN16	3.300	1.950	2.140	5.075
ROBOT 252 DA	10,44 - 368,7	18,00 - 635,6	13 - 188,5	132 - 180	1.500	78	DN100-PN16	3.300	1.950	2.140	5.075
ROBOT 290 DA	10,50 - 370,8	30,20 - 1.066,5	7,5 - 108,7	160 - 220	1.500	79	DN100-PN16	3.300	1.950	2.140	5.150
ROBOT 291 DA	10,29 - 363,4	26,50 - 935,8	10 - 145,0	160 - 220	1.500	79	DN100-PN16	3.300	1.950	2.140	5.150
ROBOT 292 DA	10,01 - 353,5	22,10 - 780,4	13 - 188,5	160 - 220	1.500	79	DN100-PN16	3.300	1.950	2.140	5.150
ROBOT 370 DA	10,98 - 387,8	36,60 - 1.291,5	7,5 - 108,7	200 - 270	1.500	80	DN100-PN16	3.300	1.950	2.140	5.250
ROBOT 371 DA	10,85 - 383,2	31,00 - 1.094,7	10 - 145,0	200 - 270	1.500	80	DN100-PN16	3.300	1.950	2.140	5.250
ROBOT 372 DA	10,60 - 374,3	27,20 - 960,5	13 - 188,5	200 - 270	1.500	80	DN100-PN16	3.300	1.950	2.140	5.250
ROBOT 430 DA	10,67 - 376,8	42,70 - 1.507,9	7,5 - 108,7	250 - 340	1.500	81	DN100-PN16	3.300	1.950	2.140	5.720
ROBOT 431 DA	10,64 - 375,7	38,00 - 1.341,9	10 - 145,0	250 - 340	1.500	81	DN100-PN16	3.300	1.950	2.140	5.720
ROBOT 432 DA	10,29 - 363,4	33,20 - 1.172,4	13 - 188,5	250 - 340	1.500	81	DN100-PN16	3.300	1.950	2.140	5.720

ALL PERFORMANCE DATA ACCORDING TO CAGI PNEUROP / PN2CPTC2 NORMS.

**GUARANTEED TOLERANCES:** UNDER NOMINAL CONDITIONS, THE INDICATED FREE AIR DELIVERY (M<sup>3</sup>/MIN) AND SPECIFIC POWER (KW X MIN / M<sup>3</sup>) ARE COMPLIANT WITH ISO 1217 STANDARDS.

**STANDARDS :** FREE AIR DELIVERY-PRESSURE (CAGI PNEUROP PN2CPTC2-ISO 1217), SOUND LEVEL (CAGI PNEUROP PN8NTC2), QUALITY ASSURANCE (ISO 9001:2008)

MANUFACTURED IN SARMAK MAKINA A.S. FACILITIES, NEW GENERATION ROBOT 250 - 432 DA SERIES COMPRESSORS ARE PRODUCED WITH THE UTMOST IMPORTANCE AND STATE-OF-THE-ART TECHNOLOGY. EACH AND EVERY UNIT IS TESTED IN DETAIL FOR FUNCTIONALITY AND PERFORMANCE IN OUR MODERN TEST CENTER DESIGNED ACCORDING TO ISO STANDARDS. AFTERWARDS, EACH UNIT IS CHECKED BY OUR EXPERIENCED ENGINEERS FOR SARMAK QUALITY ASSURANCES. FINALLY, THE UNIT IS PACKAGED AND SHIPPED FOR START-UP AT CUSTOMER'S SITE.

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**SARMAK**  
COMPRESSORS + ENGINEERING

# SARMAK PISTON COMPRESSORS – AIR COMPRESSORS

(1,1 kW – 7,5 kW)

## LEGEND AND LEGACY

READY TO WORK HARD FOR LONG YEARS.

## FEATURES AND ADVANTAGES OF THE SYSTEM

### SUITABLE BODY FOR HEAVY DUTY

- CAST IRON CYLINDER AND CYLINDER HEADS
- NODULAR CAST IRON CRANKSHAFT CONNECTED TO BODY BY BALLBEARING
- SPECIAL ALLOY ALUMINIUM CONNECTING RODS

### LOW MAINTENANCE COSTS

BEST IN CLASS DESIGN PISTON COMPRESSORS MEAN LOW MAINTENANCE COSTS.

### RELIABLE BEARING SYSTEM

SELF LUBRICATED SPECIAL ALLOY JOURNAL BEARING (IN TWO-STAGE HEAVY DUTY MODELS, CONNECTING ROD, HUB AND GUDGEON PIN BEARINGS ARE NEEDLE BEARINGS).

### SPECIAL VALVES

MANUFACTURED FROM SPECIAL ALLOY STEEL, CONCENTRIC RING TYPE VALVES PROVIDE CONTINUOUS COMPRESSED AIR FLOW.

### SAFE MOTOR PROTECTION SWITCH

PROTECTION AGAINST ELECTRICAL FLUCTUATIONS.  
(ONLY AVAILABLE IN OSELO, ÇİTA AND PANTER MODELS)



# PISTON POWER SERIES \_

## AIR COMPRESSORS

(1,1 kW - 7,5 kW)



# TECHNICAL SPECIFICATIONS

## SINGLE STAGE

Model	Suction Air Capacity (lt/min)	Max. Pressure (bar)	Number of Cylinders	Reservoir Tank Capacity (lt)	Nominal Motor Power (kW - HP)		Dimensions			Total Weight (kg)
							Length (mm)	Width (mm)	Height (mm)	
OSELO 117	170	8	1	100	1,1	1,5	1.140	470	910	125
OSELO 117 - M*	170	8	1	100	1,1	1,5	1.140	470	910	125
ÇİTA 125	250	8	2	150	1,5	2,0	1.420	470	910	155
ÇİTA 125 - M*	250	8	2	150	1,5	2,0	1.420	470	910	155
ÇİTA 143	430	8	2	200	2,2	3,0	1.480	500	990	165
PANTER 170	700	8	2	300	4,0	5,5	1.650	550	1.115	245
PANTER 170-500	700	8	2	500	4,0	5,5	2.020	640	1.240	298
KAPLAN 1105 (W/O PANEL)	1.050	8	3	500	5,5	7,5	2.020	640	1.320	350
KAPLAN 1105-P (W/ PANEL)	1.050	8	3	500	5,5	7,5	2.020	640	1.320	350
ASLAN 1140 (W/O PANEL)	1.400	8	4	500	7,5	10	2.020	640	1.410	415
ASLAN 1140-P (W/ PANEL)	1.400	8	4	500	7,5	10	2.020	640	1.410	415

## TWO STAGE

Model	Suction Air Capacity (lt/min)	Max. Pressure (bar)	Number of Cylinders (1 <sup>ST</sup> Stage)	Number of Cylinders (2 <sup>ND</sup> Stage)	Reservoir Tank Capacity (lt)	Nominal Motor Power (kW - HP)		Dimensions			Total Weight (kg)
								Length (mm)	Width (mm)	Height (mm)	
ÇİTA 217	170	15	1	1	150	1,5	2,0	1.450	470	860	160
ÇİTA 217 - M*	170	15	1	1	150	1,5	2,0	1.450	470	860	160
PANTER 235	350	15	1	1	300	3,0	4,0	1.650	550	1.115	235
PANTER 235 - 500	350	15	1	1	500	3,0	4,0	2.020	640	1.240	311
KAPLAN 270 (W/O PANEL)	700	15	2	1	500	5,5	7,5	2.020	640	1.320	368
KAPLAN 270-P (W/ PANEL)	700	15	2	1	500	5,5	7,5	2.020	640	1.320	368
ASLAN 2105 (W/O PANEL)	1.050	15	3	1	500	7,5	10	2.020	640	1.410	435
ASLAN 2105-P (W/ PANEL)	1.050	15	3	1	500	7,5	10	2.020	640	1.410	435

\* OSELO, ÇİTA, PANTER TYPE COMPRESSORS INCLUDE MOTOR PROTECTION SWITCH. (NO NEED FOR ELECTRICAL PANEL)

STANDARDS: MANUFACTURED ACCORDING TO TSE, TSEK, ISO 9001:2008, GOST-R AND 97/23/EC PED DIRECTIVE.

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# SARMAK AIR DRYERS —

## (REFRIGERATION TYPE)

### INDISPENSABLE COMPANION TO COMPRESSORS

QUALITY DOWNSTREAM COMPRESSED AIR REQUIRES QUALITY DRYERS.



### FEATURES OF THE SYSTEM

- ELECTRONIC CONTROL PANEL
- PATENTED ALU-DRY ALUMINIUM EXCHANGER MODULE
- "HOT GAS" BYPASS VALVE
- CONDENSATE DRAIN

### NOMINAL CONDITIONS

- 25°C AMBIENT TEMPERATURE
- 35°C INLET AIR TEMPERATURE
- 7 BAR INLET AIR PRESSURE
- 5°C (AMD) AND 3°C (ACT) PRESSURE DEW POINTS

### MAXIMUM CONDITIONS

- 45°C AMBIENT TEMPERATURE (FOR AMD)
- 50°C AMBIENT TEMPERATURE (FOR ACT)
- 55°C AMBIENT TEMPERATURE (FOR AMD)
- 70°C AMBIENT TEMPERATURE (FOR ACT)
- 14 BAR INLET AIR PRESSURE (16 BAR FOR AMD 12&18)



# TECHNICAL SPECIFICATIONS

Model	Capacity (m <sup>3</sup> /min)	Connections ø(In-Out)	Power Supply (Ph/V/Fr)	Dimensions			Total Weight (kg)
				Width (mm)	Depth (mm)	Height (mm)	
AMD 12	1,2	G 1/2" BSP-F	1/230/50	370	515	475	28
AMD 18	1,8	G 1/2" BSP-F	1/230/50	370	515	475	32
AMD 25	2,5	G 1" BSP-F	1/230/50	345	420	740	34
AMD 32	3,2	G 1 1/4" BSP-F	1/230/50	345	445	740	39
AMD 43	4,3	G 1 1/4" BSP-F	1/230/50	345	445	740	40
AMD 52	5,2	G 1 1/4" BSP-F	1/230/50	345	445	740	41
ACT 60	6,2	G 1 1/2" BSP-F	1/230-240/50	555	580	885	63
ACT 80	8,1	G 2" BSP-F	1/230-240/50	555	625	975	103
ACT 100	10,5	G 2" BSP-F	1/230-240/50	555	625	975	107
ACT 120	12,5	G 2 1/2" BSP-F	1/230-240/50	665	725	1.105	114
ACT 140	14,5	G 2 1/2" BSP-F	1/230-240/50	665	725	1.105	116
ACT 160	16	G 2 1/2" BSP-F	1/230-240/50	665	725	1.105	161
ACT 180	18	DN 80-PN 16	3/400-415/50	785	950	1.410	185
ACT 210	21	DN 80-PN 16	3/400-415/50	785	950	1.410	190
ACT 250	25	DN 80-PN 16	3/400-415/50	785	950	1.410	250
ACT 300	30	DN 80-PN 16	3/400-415/50	785	950	1.410	275
ACT 400	40	DN 100-PN 16	3/400-415/50	1.005	1.535	1.760	530
ACT 500	50	DN 100-PN 16	3/400-415/50	1.005	1.535	1.760	582
ACT 600	60	DN 100-PN 16	3/400-415/50	1.005	1.535	1.760	595
ACT 720	73,6	DN 125-PN 16	3/400-415/50	1.005	1.535	1.760	620
ACT 900*	90	DN 150-PN 16	3/400-415/50	1.550	2.200	1.680	840
ACT 1100*	110,4	DN 150-PN 16	3/400-415/50	1.550	2.200	1.680	1.010
ACT 1200*	120	DN 150-PN 16	3/400-415/50	1.550	2.200	1.680	1.020
ACT 1500*	150	DN 200-PN 16	3/400-415/50	1.550	2.650	1.730	1.350
ACT 1800*	180	DN 200-PN 16	3/400-415/50	1.550	3.020	1.730	1.680

\* WATERCOOLED VERSIONS ARE AVAILABLE UPON REQUEST.

STANDARDS: ISO 9001: 2008, ASME SEC. VIII DIV.1, ASME NB, DIR. 97/23/CE PED, GOST-R, CE REG.303/ 2008, MONTREAL PROTOCOL.

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# SARMAK AIR DRYERS —

(ADSORPTION TYPE)

**THE CHEMIST WHO WIPES OUT HUMIDITY**

SPECIAL DRYER FOR SENSITIVE APPLICATIONS.



## FEATURES OF THE SYSTEM

- ELECTRONICALLY CONTROLLED
- MOLECULAR SIEVE AND REGENERATION-TYPE CARBON STEEL TWIN TOWERS
- 14.4% PURGE AIR
- HEATLESS TYPE
- INTEGRATED 0.01 MICRON INLET OIL FILTER
- INTEGRATED 1 MICRON DISCHARGE DUST FILTER

## NOMINAL CONDITIONS

- 35°C INLET AIR TEMPERATURE
- 7 BAR INLET AIR PRESSURE
- -20°C / -40°C / -70°C PRESSURE DEW POINT OPTIONS

## MAXIMUM CONDITIONS

- 50°C AMBIENT TEMPERATURE
- 50°C INLET AIR TEMPERATURE
- 10.3 BAR INLET AIR PRESSURE

## APPLICATION AREAS

-PHARMACEUTICAL, CHEMICAL, LABORATORY, MEDICAL, ELECTRONICS, FOOD & BEVERAGE, PACKAGING AND HIGH QUALITY COMPRESSED AIR REQUIRED INDUSTRIES. (AIR QUALITY CONFORMING TO ISO 8573.1)

# TECHNICAL SPECIFICATIONS

Model	Capacity (m <sup>3</sup> /min)	Connections ø(In-Out)	Dimensions			Total Weight (kg)
			Width (mm)	Depth (mm)	Height (mm)	
HDT 12	1,2	G1/2" BSP-F	520	600	1.945	87
HDT 18	1,8	G3/4" BSP-F	630	600	1.940	111
HDT 25	2,5	G1" BSP-F	755	600	1.945	128
HDT 30	3	G1" BSP-F	855	700	1.935	161
HDT 40	3,9	G1 1/2" BSP-F	920	700	1.920	186
HDT 50	5	G1 1/2" BSP-F	1.005	700	1.985	232
HDT 60	6,2	G1 1/2" BSP-F	1.035	700	1.940	283
HDT 75	7,5	G1 1/2" BSP-F	1.060	700	2.000	305
HDT 90	9	G1 1/2" BSP-F	1.060	700	1.995	340
HDT 130	12,8	G2" BSP-F	1.200	760	2.020	403
HDT 160	16,2	G2" BSP-F	1.310	870	2.020	485
HDT 200	20,5	G2 1/2" BSP-F	1.475	1.040	2.162	702
HDT 250	25,5	G2 1/2" BSP-F	1.525	1.050	2.180	813
HDT 300	30,3	DN80 - PN16	1.535	1.050	2.280	1.113
HDT 350	36	DN80 - PN16	1.625	1.200	2.320	1.250
HDT 400	42	DN80 - PN16	1.675	1.200	2.340	1.850
HDT 450	45,6	DN100 - PN16	1.800	1.300	2.465	2.400
HDT 620	62,5	DN125 - PN16	1.985	1.600	2.485	2.800
HDT 800	81	DN150 - PN16	2.260	1.760	2.680	3.400
HDT 1000	102	DN150 - PN16	2.480	1.940	2.700	4.000
HDT 1200	126	DN150 - PN16	2.640	2.210	2.885	4.900
HDT 1500	151	DN200 - PN16	2.795	2.290	2.965	5.500

STANDARDS: ISO 9001: 2008, ASME SEC. VIII DIV.1, ASME NB, DIR. 97/23/CE PED, GOST-R, CE REG.303/ 2008, MONTREAL PROTOCOL.

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# SARMAK FILTRATION – SMALL AND MEDIUM CAPACITY COMPRESSED AIR FILTERS

## BUSY WITH CLEANING THE AIR

PREFERRED CHOICE FOR QUALITY DOWNSTREAM COMPRESSED AIR WITHOUT  
DUST, OIL OR OIL VAPOR PARTICLES.

CARTRIDGE-TYPE COMPRESSED AIR FILTERS WHICH FILTER OIL, OIL VAPOR AND DUST PARTICLES; DEPENDING ON AIR QUALITY CLASS. THEY CONTAIN MULTI LAYERS AND HAVE WIDE AREA OF FILTRATION, MANUFACTURED IN HIGH STANDARDS. IT IS RECOMMENDED THAT THESE COMPRESSED AIR FILTERS ARE UTILIZED BEFORE AND AFTER COMPRESSED AIR DRYERS. CDF SERIES PRODUCT RANGE CONFORMS TO "PRESSURE EQUIPMENTS DIRECTIVE (97/23 CE) AND AIR PURITY GUIDELINE (ISO 8573.1-1:2010).

### FILTER TYPES AND SENSITIVITIES:

- **RM:** 10 MICRON DUST SENSITIVITY, 15 PPM OIL SENSITIVITY (BEFORE DRYER)
- **RB:** 1 MICRON DUST SENSITIVITY, 0.1 PPM OIL SENSITIVITY (BEFORE DRYER)
- **RA:** 0.01 MICRON DUST SENSITIVITY, 0.01 PPM OIL SENSITIVITY (AFTER DRYER)
- **CA:** 0.003 PPM OIL VAPOR SENSITIVITY (AFTER DRYER)



## TECHNICAL SPECIFICATIONS

Model	Nominal Capacity (m <sup>3</sup> /min)	Connection	Max. Pressure (bar)	Max. Temperature (°C)	Material	Diameter x Depth x Height (mm)	Total Weight (kg)
CLP 64*	1,1	3/8" GAS	16	80	Aluminium	94 x 50 x 286	1
CLP 105*	1,8	1/2" GAS	16	80	Aluminium	94 x 50 x 286	1
CLP 190*	3,2	3/4" GAS	16	80	Aluminium	128 x 60 x 323	1,7
CLP 300*	5,0	1" GAS	16	80	Aluminium	128 x 60 x 378	2,1
CLP 480*	8,0	1 1/4" GAS	16	80	Aluminium	120 x 60 x 459	2,2
CLP 700*	11,7	1 1/2" GAS	16	80	Aluminium	190 x 80 x 560	4,5
CLP 1000*	16,7	2" GAS	16	80	Aluminium	190 x 80 x 659	5,0
CLP 1200*	20,0	2 1/2" GAS	16	80	Aluminium	190 x 80 x 659	5,0
CDF-1500-MD*	25	DN80 PN16	16	80	Aluminium	350 x 270 x 709	22
CDF-2300-MD*	38,3	3" GAS	16	80	Aluminium	350 x 630 x 1.060	28

\*DETERMINES OF THE LEVEL OF THE FILTRATION. (RM, RB, RA OR CA LEVELS)

STANDARDS: ISO 9001: 2008, dir. 97/23/CE PED.

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# SARMAK FILTRATION

## HIGH CAPACITY COMPRESSED AIR FILTERS

### BUSY WITH CLEANING THE AIR

PREFERRED CHOICE FOR QUALITY DOWNSTREAM COMPRESSED AIR WITHOUT DUST, OIL OR OIL VAPOR PARTICLES.

CARTRIDGE-TYPE COMPRESSED AIR FILTERS WHICH FILTER OIL, OIL VAPOR AND DUST PARTICLES; DEPENDING ON AIR QUALITY CLASS. THEY CONTAIN MULTI LAYERS AND HAVE WIDE AREA OF FILTRATION, MANUFACTURED IN HIGH STANDARDS. IT IS RECOMMENDED THAT THESE COMPRESSED AIR FILTERS ARE UTILIZED BEFORE AND AFTER COMPRESSED AIR DRYERS. FILTER BODY IS PRE-TREATED INSIDE AND OUTSIDE WITH ELECTROPHORETIC COATING TO INCREASE CORROSION RESISTANCE. LOWER FLANGE IS PROVIDED WITH A HINGE AND HANDLE MECHANISM TO ALLOW A SINGLE OPERATOR TO OPEN THE VESSEL FOR REPLACEMENT.

#### FILTER TYPES AND SENSITIVITIES:

- **P:** 3 MICRON DUST SENSITIVITY (BEFORE DRYER)
- **S:** 1 MICRON DUST SENSITIVITY, 0.1 PPM OIL SENSITIVITY (BEFORE DRYER)
- **X:** 0.01 MICRON DUST SENSITIVITY, 0.01 PPM OIL SENSITIVITY (AFTER DRYER)
- **Z:** 0.003 PPM OIL VAPOR SENSITIVITY (AFTER DRYER)



## TECHNICAL SPECIFICATIONS

Model	Nominal Capacity (m <sup>3</sup> /min)	Connection	Max. Pressure (bar)	Number x Filter Element	Material	Diameter x Height (mm)	Total Weight (kg)
<b>FW* 450</b>	45,6	DN100 - PN16	16	2 x FW* 220	Carbon Steel	390 x 1.120	71
<b>FW* 680</b>	68,4	DN125 - PN16	16	3 x FW* 220	Carbon Steel	470 x 1.160	95
<b>FW* 900</b>	91,2	DN150 - PN16	16	4 x FW* 220	Carbon Steel	580 x 1.250	181
<b>FW* 1100</b>	114	DN150 - PN16	16	5 x FW* 220	Carbon Steel	580 x 1.250	184
<b>FW* 1300</b>	136,8	DN150 - PN16	16	6 x FW* 200	Carbon Steel	640 x 1.270	222
<b>FW* 1500</b>	159,6	DN200 - PN16	16	7 x FW* 200	Carbon Steel	670 x 1.350	279
<b>FW* 1800</b>	182,4	DN200 - PN16	16	8 x FW* 200	Carbon Steel	670 x 1.350	280
<b>FW* 2000</b>	205,2	DN200 - PN16	16	9 x FW* 200	Carbon Steel	670 x 1.350	282
<b>FW* 2200</b>	228	DN200 - PN16	16	10 x FW* 200	Carbon Steel	730 x 1.400	324
<b>FW* 2700</b>	273,6	DN200 - PN16	16	12 x FW* 200	Carbon Steel	730 x 1.400	327
<b>FW* 3100</b>	319,2	DN250 - PN16	16	14 x FW* 200	Carbon Steel	840 x 1.500	397
<b>FW* 3600</b>	364,8	DN250 - PN16	16	16 x FW* 200	Carbon Steel	840 x 1.500	499
<b>FW* 4000</b>	410,4	DN250 - PN16	16	18 x FW* 200	Carbon Steel	840 x 1.500	502

\*DETERMINES OF THE LEVEL OF THE FILTRATION. (P, S, X OR Z LEVELS)

STANDARDS: ISO 9001: 2008, dir. 97/23/CE PED.

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# ENGINEERING SERVICES \_

## THINK TANK

SPECIALIST TEAM TO MANAGE YOUR COMPRESSED AIR SYSTEM.

## DATALOGGER ANALYSIS SYSTEM \_



### FOR RELIABLE ANALYSIS OF COMPRESSED AIR CONSUMPTION DEMAND

ADVANCED AIR COMPRESSOR MONITORING SYSTEM, USED TOGETHER WITH AUTOMATION SYSTEM. DOWNLOADED TO A PERSONAL COMPUTER STATION, THIS SOFTWARE PROGRAM CONNECTS WITH ANALYZE SYSTEM AND THUS COMPRESSOR ITSELF. THIS CONNECTION TYPE IS DONE VIA A NETWORK GATEWAY OR A COMMUNICATION BOX. ANALYZE SYSTEM WORKS REAL-TIME AND LOGS ALL THE NECESSARY PARAMETERS OF THE COMPRESSOR AND ALSO GIVES OUT A DETAILED ANALYSIS REPORT.

## AUTOMATION SYSTEMS \_



### MULTI-COMPRESSOR AUTOMATION SYSTEMS

**DCO:** HAS UP-TO-4 COMPRESSOR MANAGEMENT CAPABILITY. DCO UTILIZES SINGLE PRESSURE BAND CONTROL TECHNOLOGY WITH HIGH ACCURACY PRESSURE SENSOR. AS DEFAULT, THE PRESSURE SENSOR OPERATES BETWEEN 4 - 20 mA RANGE. EACH AIR COMPRESSOR MUST BE EQUIPPED WITH A LOAD/ UNLOAD REGULATION SYSTEM OR REGULATED WITH A SINGLE ELECTRO-MECHANICAL PRESSURE SWITCH.

**SX:** HAS UP-TO-12 COMPRESSOR MANAGEMENT CAPABILITY. SX ALGORITHM MANAGEMENT AUTOMATION SOFTWARE CAN DETECT DIFFERENT TYPES OF COMPRESSORS (E.G. 50 kW, 100 kW ETC). SX IS ABLE TO FOLLOW AN 'OPTIMAL ENERGY' CONTROL STRATEGY. MULTI VSD CONTROL SOFTWARE USES VSD COMPRESSORS' MINIMUM, MAXIMUM, OPTIMUM SPEEDS TO SUCCESSFULLY MANAGE COMPRESSOR SYSTEMS.

**XC:** HAS UP-TO-24 COMPRESSOR MANAGEMENT CAPABILITY. XC IS THE MOST COMPLETE & ADVANCED COMPRESSOR MANAGEMENT PRODUCT. XC CARRIES ALL THE FEATURES OF SX, BUT WITH AN INCREASED FOCUS ON LARGE COMPRESSOR SYSTEMS & SYSTEM BUILDING. AS THE POTENTIAL FOR THIS MANY COMPRESSORS TO BE IN A SINGLE LOCATION IS LESS LIKELY, SOME UNIQUE SOFTWARE FEATURES ARE ADDED TO XC. THERE'S A DEDICATED <START> FUNCTION ENABLING AUXILIARY DOWNSTREAM EQUIPMENT TO BE PRE-STARTED PRIOR TO UTILIZATION OF ANY COMPRESSOR. PRESSURE DROPS ARE ALSO TAKEN INTO ACCOUNT IN THE ALGORITHMS.

# AUXILIARY EQUIPMENTS \_

## HEAT RECOVERY MODULE \_

### CONVERSION OF OIL/AIR HEAT FROM COMPRESSOR UNIT

HEAT ENERGY IS A COMMON ENERGY TYPE WHICH IS DISSIPATED FROM THE COMPRESSOR UNIT TO THE ATMOSPHERE, THUS WASTED. HOWEVER, IT CAN BE UTILIZED INSTEAD OF WASTING IT. FOR EXAMPLE, IT CAN BE USED FOR PERSONNELS' WASHING NEEDS, HEATING LARGE VOLUMES OF WATER OR HEATING SURFACES. REASONABLE COST REDUCTIONS CAN BE ACHIEVED THROUGH THIS SYSTEM.

## WALL TYPE INVERTOR MODULE \_

(FOR 11 kW - 250 kW)



### FOR ENERGY SAVING FROM THE EXISTING COMPRESSOR SYSTEMS

THE INVERTER MODULE SAVES ENERGY OF THE COMPRESSOR AND EXTENDS THE LIFE OF THE ELECTRIC MOTOR. RELATED MOTOR FAILURES ARE MINIMIZED. THE DIRECT TORQUE CONTROL (DTC) AND THE MOTOR ELECTROMAGNETIC STATE ARE DIRECTLY LINKED; THUS THE INVERTER MODULE CAN SAVE UP TO 25%.

ALSO, DURING MOTOR START-UP, SUDDEN LOADS CAN BE ELIMINATED, THEREFORE MOTOR PROTECTION IS MAXIMIZED.

## ELECTRONIC LEVEL CONTROLLED CONDENSATE DRAIN \_



### GENERAL INFORMATION

- USED FOR SCREW COMPRESSORS
- RECOMMENDED BY SARMAK, FOR USE IN COMPRESSED AIR SYSTEMS.

### ADVANTAGES

- OPERATES ACCORDING TO REAL LEVEL OF CONDENSATE
- NO AIR LOSS AT THE COMPRESSED AIR DISCHARGE
- MINIMAL ENERGY CONSUMPTION
- FUNCTIONS NOT AFFECTED BY PARTICULES
- WIDE AREA SECTIONS NOT AFFECTED BY PARTICULE COLLECTIONS
- EASY HANDLING, ALARM MODE AVAILABLE

## OIL/ WATER SEPARATOR \_



### GENERAL INFORMATION

CONDENSATE CONSISTS OF 99% OF WATER AND ONLY 1% OIL. PROCESSING THE CONDENSATE ON SITE REDUCES COSTS BY SELLING DISPOSAL TO SPECIALIST COMPANIES. THIS SYSTEM **PROTECTS THE ENVIRONMENT** BY SEPARATING OIL AND WATER IN THE CONDENSATE.

### ADVANTAGES

- CONVENIENT DIMENSIONS
- SIMPLE INSTALLATION: NO ELECTRICITY COSTS
- LOW MAINTENANCE
- SAFE AND EASY CARTRIDGE REPLACEMENT

# SARMAK AFTERSALES SERVICE

## SOUL OF A MACHINE

EVERYTHING BEGINS AFTER THE SALES.



## GENERAL MAINTENANCE AND SERVICES

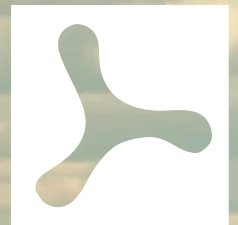
SARMAK COMPRESSORS' AND EQUIPMENTS' GENERAL MAINTENANCE & SERVICES ARE ACCOMPLISHED BY OUR OWN SERVICE PERSONNEL TOGETHER WITH OUR SERVICE PARTNERS ABROAD. OUR EXPERIENCED SERVICE TEAM IS PERIODICALLY TRAINED IN THEORY AND PRACTICE TO MEET HIGH STANDARDS.

OUR PROFESSIONAL AFTERSALES SERVICES ARE ONE OF OUR KEY ADVANTAGES WHICH IS ALSO PRICED ACCEPTABLE. TO REACH AND GO BEYOND OUR CUSTOMERS' EXPECTATIONS IN THIS AREA; WE CONTINUOUSLY DEVELOP OUR SERVICE TEAM'S CAPABILITIES FOR THE TOP SARMAK QUALITY.

## GENUINE SPARE PARTS

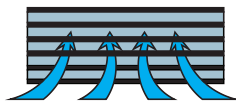
BY UTILIZING GENUINE SPARE PARTS, OUR CUSTOMERS CAN KEEP THEIR AIR COMPRESSORS & EQUIPMENTS FREE OF TROUBLE. ALSO, NOT USING PIRATE SPARE PARTS WILL KEEP THEM AWAY FROM LOW PERFORMANCE AND HIGH HIDDEN COSTS.





**SARMAK**  
COMPRESSORS + ENGINEERING

# **SAMPLE COMPRESSED AIR SYSTEM DIAGRAM –**



Compressor Room  
Ventilation 0.016 m<sup>2</sup>/kW

