

## Standard Specification

VPLUS

| Item · Unit                     |                    | Model               | OSP-160VAN2                           | OSP-160VWN2                               |
|---------------------------------|--------------------|---------------------|---------------------------------------|---|
| Cooling Method                  |                    | –                   | Air-Cooled                            | Water-Cooled                              |
| Nominal Output                  |                    | kW                  | 160                                   |   |
| Rated                           | Discharge Pressure | MPa                 | 0.7                                   |   |
|                                 | Discharge Capacity | m <sup>3</sup> /min | 29.5                                  |   |
| PQ Wide Mode                    | Discharge Pressure | MPa                 | 0.95                                  |   |
|                                 | Discharge Capacity | m <sup>3</sup> /min | 25.2                                  |   |
| PQ Wide Mode Range              |                    | MPa                 | 0.7 – 0.95                            |   |
| Intake Air Pressure/Temperature |                    | –                   | Atmospheric Pressure / 0 to 45°C      |   |
| Discharge Temperature           |                    | °C                  | Atmospheric Temperature + 15 or below | Temperature of Cooling Water +13 or below |
| Driving Method                  |                    | –                   | Gear Drive                            |   |
| Starting Type                   |                    | –                   | Inverter                              |   |
| Lubricating Oil                 |                    | –                   | HITACHI NEW HISCREW OIL NEXT          |   |
| Lubricating Oil Quantity        |                    | L                   | 115                                   | 70  |
| Nominal Output of Cooling Fan   |                    | kW                  | 4.0x2 (with Inverter Control)         | 0.2                                       |
| Discharge Pipe Diameter         |                    | B                   | 3                                     |   |
| Cooling Water                   | Temperature        | °C                  | 35 or below                           |   |
|                                 | Quantity           | L/min               | 180                                   |   |
| Dimension (WxDxH)               |                    | mm                  | 2,700x2,000x1,890                     |   |
| Weight                          |                    | kg                  | 3,900                                 | 3,750                                     |

## M type

| Item · Unit                     |                    | Model               | OSP-132M5AN2                          | OSP-160M5AN2       | OSP-132M5WN2                              | OSP-160M5WN2       |
|---------------------------------|--------------------|---------------------|---------------------------------------|--------------------|---|--------------------|
| Cooling Method                  |                    | –                   | Air-cooled                            |                    | Water-Cooled                              |                    |
| Nominal Output                  |                    | kW                  | 132                                   | 160                | 132                                       | 160                |
| Rated                           | Discharge Pressure | MPa                 | 0.75 (0.85) [1.0]                     |                    |   |                    |
|                                 | Discharge Capacity | m <sup>3</sup> /min | 25.5 (23.3) [21.0]                    | 29.5 (27.2) [24.5] | 25.5 (23.3) [21.0]                        | 29.5 (27.2) [24.5] |
| Intake Air Pressure/Temperature |                    | –                   | Atmospheric pressure / 0 to 45°C      |                    |   |                    |
| Discharge Temperature           |                    | °C                  | Atmospheric Temperature + 15 or below |                    | Temperature of Cooling Water +13 or below |                    |
| Driving Method                  |                    | –                   | Gear Drive                            |                    |   |                    |
| Starting Type                   |                    | –                   | Star-delta                            |                    |   |                    |
| Lubricating Oil                 |                    | –                   | HITACHI NEW HISCREW OIL NEXT          |                    |   |                    |
| Lubricating Oil Quantity        |                    | L                   | 105                                   | 115                | 65  | 70                 |
| Nominal Output of Cooling Fan   |                    | kW                  | 4.0x2 (with Inverter Control)         |                    | 0.2                                       |                    |
| Discharge Pipe Diameter         |                    | B                   | 3                                     |                    |   |                    |
| Cooling Water                   | Temperature        | °C                  | 35 or below                           |                    |   |                    |
|                                 | Quantity           | L/min               | 180                                   |                    |   |                    |
| Dimension (WxDxH)               |                    | mm                  | 2,700x2,000x1,890                     |                    |   |                    |
| Weight                          |                    | kg                  | 3,450                                 | 3,600              | 3,300                                     | 3,420              |

### Note:

- Capacity is the converted value at its inlet condition. Capacity is measured at following pressures.  
0.75MPa models: 0.7MPa, 0.85MPa models: 0.8MPa, 1.0MPa models: 0.95MPa  
For guaranteed values, contact your nearest dealer or HITACHI local representative offices.
- Pressure is indicated as the gauge pressure.
- Temperature of discharge air may vary from different environments.
- Contact the supplier for the dryer and filters selection at PQ WIDEMODE ON.
- Install the proper size air receiver tank and the earth leakage circuit breaker which are out of scope of supply from Hitachi.
- Earth leakage circuit breaker need to be installed separately for each unit.
- Do NOT use any oil other than "HITACHI NEW HISCREW OIL NEXT".
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- ( ) [ ] show values of capacity under different discharge pressures.

Specifications in this catalog are subject to change with or without notice, as Hitachi continues to develop the latest technologies and products for its customers.

 Hitachi Industrial Equipment Systems Co., Ltd.

For further information, please contact your nearest sales representative.

## Hitachi Rotary Screw Compressors

**HITACHI**  
Inspire the Next

**HISCREW**  
**NEXT II series (132/160kW)**





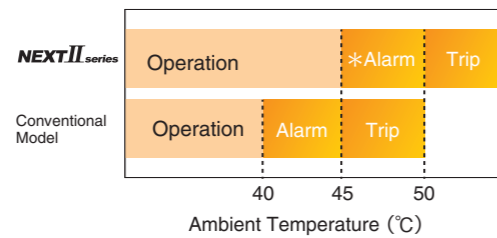
Hitachi Leading Innovation  
Advanced Energy-Saving and  
High Level of User-Friendly

**NEXT II series**  
132/160 kW

### High Reliability & Maintenance Friendly

#### Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



\* Ambient temperature alarm will be indicated when ambient temperature is over 45°C. Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

#### Overhaul Cycle – 6 years\*

Adoption of high-load bearing and high performance lubricating system makes overhaul cycle as 6 years possible.

\*Condition: 6,000hr or less Operation Time, for 1.0MPa SPEC overhaul cycle is 4 years.



#### NEW HISCREW OIL NEXT

Designed for Hitachi Oil-injected Screw Air Compressor  
Oil change cycle is every 2 years or 12,000hr which comes first.\*

\*Condition: 6,000hr or less Operation Time.



### IPC Control (Intelligent Pressure Control)

VPLUS Mtype

By estimating use point pressure in accordance with air consumption, IPC control decreases discharge pressure during low load operation, which enables Energy-Saving.

Patent JP4425768 and others

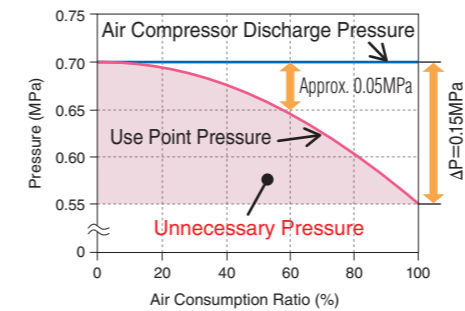
#### Example of effect by IPC

- Conditions**
- Air compressor: OSP-160VAN2
  - Control pressure setting: 0.70MPa
  - Use point pressure during full load: 0.55MPa
  - Piping pressure loss during full load: 0.15MPa

Graph of pressure change (Theoretical values)

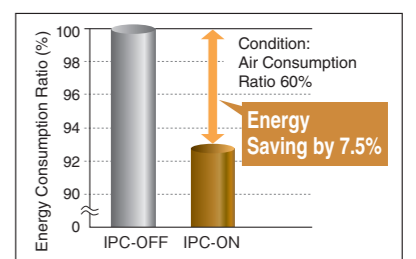
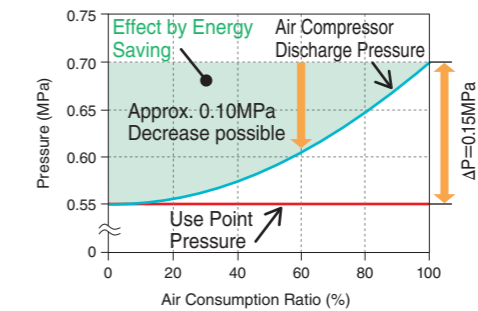
#### ① IPC-OFF (Conventional inverter control model)

Control the air compressor discharge pressure at 0.70MPa



#### ② IPC-ON (NEXT II series)

Control the use point pressure at 0.55MPa



\*Due to estimation control, use point pressure varies in accordance with use conditions.  
\*IPC control range of the constant speed unit is air consumption ratio of 50% or more.

### IT Communication Functions

#### USB Flash Memory Possible for Data Logging

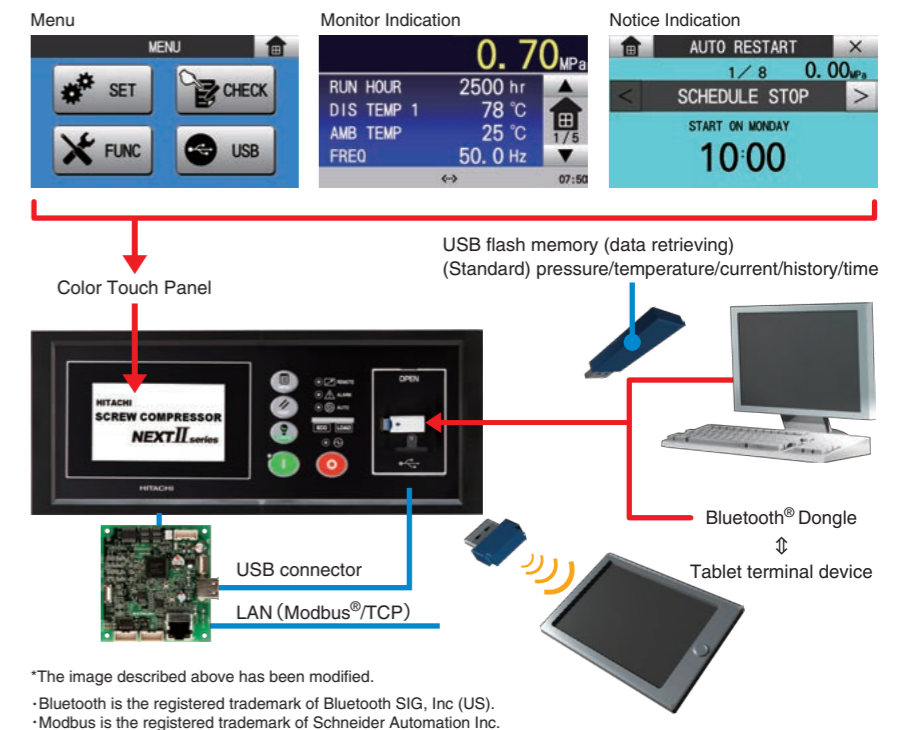
- \*Necessary to prepare a USB flash memory device (5.5 cm or smaller) on user's side.
- \*Operation data for one day is approximately 400kB. (For reference)

#### Web Server Function via Bluetooth®

- \*Necessary to prepare a Bluetooth® USB dongle on your side.
- \*For setting changes, part of the items are applicable.

#### Modbus® Communication

- Open network serial communication
- Modbus®/RTU is supported as standard
- \*Modbus®/TCP support is optional.



\*The image described above has been modified.  
\*Bluetooth is the registered trademark of Bluetooth SIG, Inc (US).  
\*Modbus is the registered trademark of Schneider Automation Inc.

### Multi-Function Touch Panel

#### Various Functions Available

##### Main Functions

- |   |                                   |   |
|---|-----------------------------------|---|
| ① Schedule Operation (Weekly Timer)                       | ⑤ AUTO Operation                  | ⑨ Store/Load of Settings                  |
| ② Instantaneous Power Interruption (IPI) Restart Function | ⑥ Communication Function          | ⑩ Maintenance Time Notification           |
| ③ Alternate Operation (Option)                            | ⑦ Web Server Function             | ⑪ Operation Data Memory, Display in Graph |
| ④ Multi-unit Control (Option)                             | ⑧ Display/Store of Operation Data | ⑫ Display of Shutdown and Alarm History   |

#### Operation Data Logging

Operation data of pressure, temperature, current and trouble history is stored. Possible to check from Touch Panel at field.