## SPECIFICATIONS

| Type | | Spot type |
|---|---|---|
| **Model No.** | | **ER-VS02** |
| Charge removal time (±1000V ±100V) (note 1) | | Max. 1s (note 2) |
| Ion balance | | Max. ±10V (note 2) |
| Ozone generation | | Max. 0.03ppm (note 3) |
| Applicable fluid | | Air (dried clean air) (note 4) |
| Supplied air flow | | Max. 500ℓ/min. (ANR) (note 5) |
| Air pressure range | | 0.05 to 0.7MPa (note 5) |
| Supply voltage | | 24VDC ±10 % |
| Current consumption | | Max. 70mA |
| Discharge method | | High frequency AC method |
| Discharge output voltage | | Approx. 2000V |
| Check output | | NPN open-collector transistor<br>• Maximum sink current: 50mA<br>• Applied voltage: max. 30VDC (between check output and 0V)<br>• Residual voltage: max. 1V (at 50mA sink current) |
| | Output operation | ON when a dirt of worn etc. of the discharge needle is detected for 1.5s or more continuousely, OFF when operation is normal. (Note 6) |
| | Short-circuit protection | Incorporated |
| Error output | | NPN open-collector transistor<br>• Maximum sink current: 50mA<br>• Applied voltage: max. 30VDC (between error output and 0V)<br>• Residual voltage: max. 1V (at 50mA sink current) |
| | Output operation | OFF when abnormal discharge is detected, ON when operation is normal |
| | Short-circuit protection | Incorporated |
| Discharge halt input | | Short-circuit to 0V: Discharge halt  Open: Discharge allowed (operation start) |
| Reset input | | When abnormal discharge is detected, discharge is halted due to an error.<br>Reset the discharge halt by briefly shorting the power supply's 0V line. |
| Accessories | | Connector for wiring: 1 set [manufactured by Molex: Housing (5557-08R), Terminal (5556TL)] |

**Notes:**
1) Where measurement conditions have not been specified precisely, the conditions used were at an ambient temperature of +20°C.
2) A typical sample applied with a supply voltage of 24V, a distance of 100mm from the front surface of the air flow outlet and a pressure of 0.25MPa while the shower nozzle is in use. (Measured on a sample left in the atmosphere at a relative humidity of max. 65% RH for at least 24 hours).
3) A typical sample applied with a power voltage of 24V, a distance of 300mm from the front surface of the air flow outlet and a pressure of 0.25MPa while the shower nozzle is in use.
4) The dried clean air is defined for air passing through air an dryer (dew point: equivalent of -20°C) and air filter (mesh-size: equivalent of 0.01μm)
5) The applicable pressure range depends on the nozzle to be used.
6) To test whether the check output works properly, the ionizer needs to discharge for at least 2 seconds.