



S-CU-450-E1-CB

EC FAN

Data Sheet

EC MOTOR DATA SHEET

1. Introduction

This is the data sheet for the product with the impeller.

This data sheet is a data value tested by the official testing and certification authority.

2. Technical Data

- ▶ Model : S-CU-450-E1-CB
- ▶ Type of Protection : IP54
- ▶ Input Voltage : 380V – 400VAC (3PHASE)
- ▶ Input Frequency : 50/60hz
- ▶ Switching Frequency : 0 ~ 10kHz
- ▶ Speed : Rated 300~1764RPM
- ▶ Input Power : MAX 1.6KW
- ▶ Operating Temperature : -40°C ~ +60°C
- ▶ Operating Humidity : +60°C , 85% R.H.,

3. Control

- ▶ Wi-fi 802.11 b/g/n
- ▶ Bluetooth Ver4.2
- ▶ Modbus RTU (RS-485)
- ▶ IoT Control

4. Data Accuracy

Platform display values and Real Measurement values

* Updated December 2024 output data accuracy, within 10% error range. *

Part	Wireless Control Platform (PC and Mobile app)	Real Measure Value	Tolerance Range
Output	1 486W	2 003W	25.8%
Speed	2 550min-1	2 571 min-1	0.8%
Current	4.717A	5.040A	6.4%

5. Fault Diagnostics

- ▶ Over Temperature (100°C)
- ▶ Gate kill (Over Current)
- ▶ Phase Loss
- ▶ Flux out of control

6. Applications

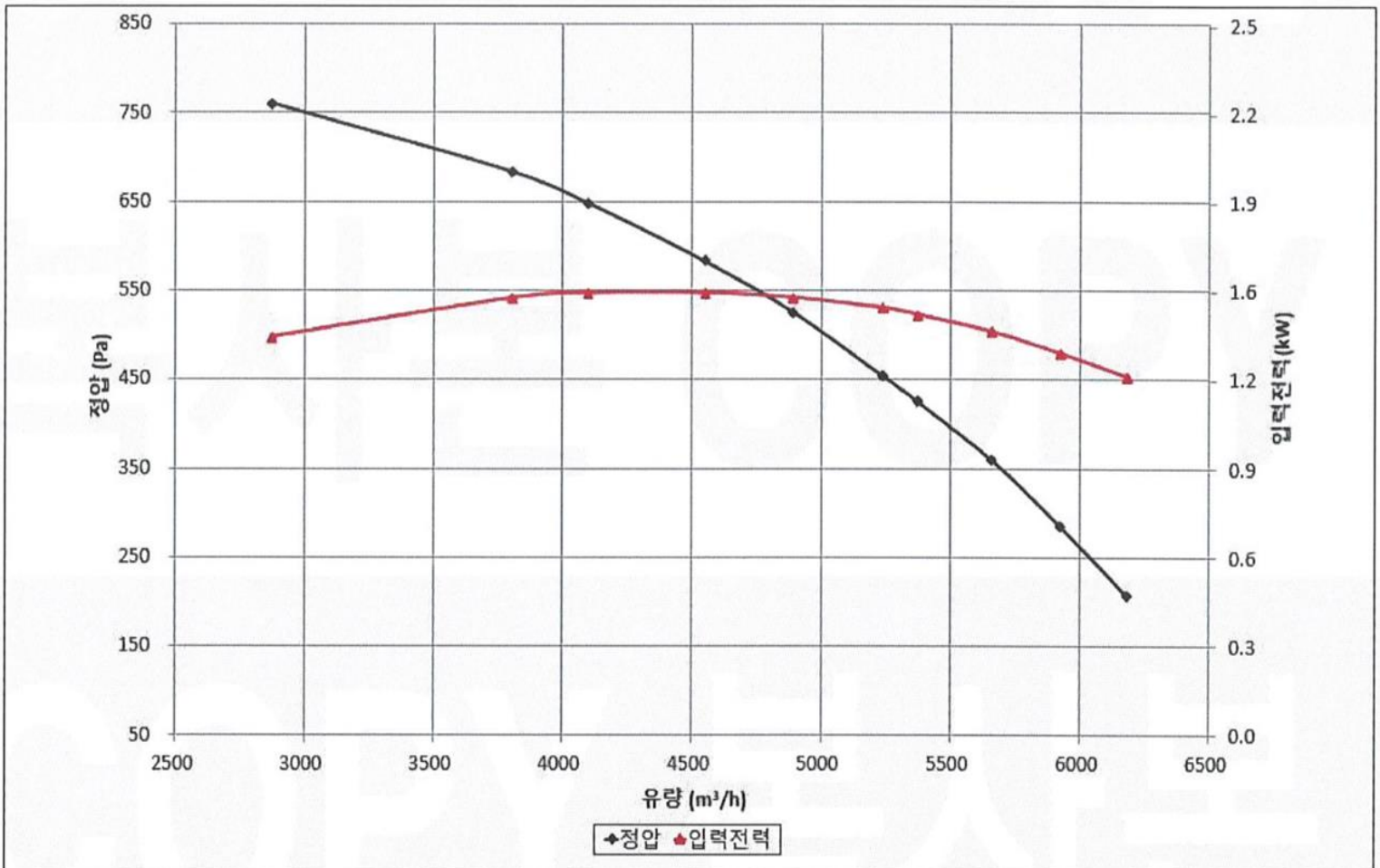
- ▶ Fans

- ▶ Pumps
- ▶ Compressors
- ▶ Blowers
- ▶ Unit Handling
- ▶ HVAC systems
- ▶ Variable speed applications
- ▶ General purpose applications

7. Control Method

- ▶ Bluetooth Control
- ▶ IoT Control
- ▶ ModbusRTU (RS-485)
- ▶ VSP (0-10V)

8. Fan Performance Curve



비고 : 표준 공기밀도(1.2 kg/m³) 및 표준 회전수(1 764 r/min)로 환산한 결과임.

9. Test Standard

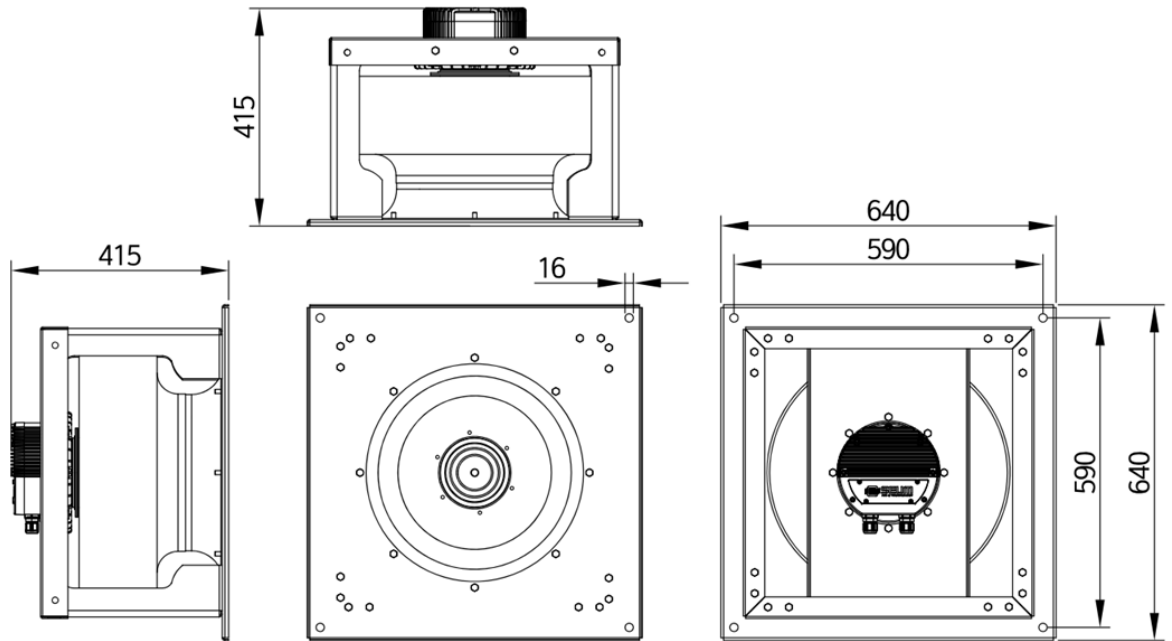
▶ KS B 6311 : 2022

시험 항목	단위	측정점									
		1	2	3	4	5	6	7	8	9	10
정압	Pa	207	285	359	425	454	525	583	648	684	760
유량	m ³ /h	6 183	5 926	5 662	5 374	5 238	4 894	4 549	4 101	3 804	2 876
입력전력	kW	1.3	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.5	1.4
비고 : 표준 공기밀도(1.2 kg/m ³) 및 표준 회전수(1 764 r/min)로 환산한 결과임.											

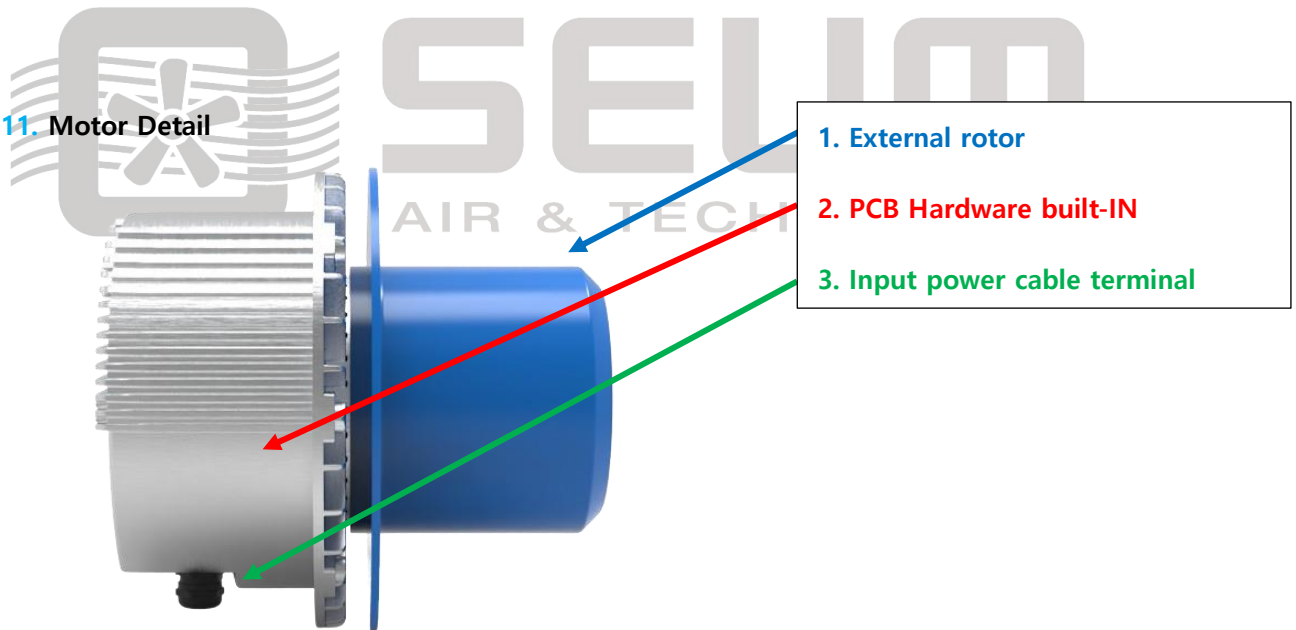
1-2. 시험 결과 : 시험 조건

시험 항목	단위	측정점									
		1	2	3	4	5	6	7	8	9	10
밀도	kg/m ³	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
정압	Pa	199	274	345	407	435	504	559	621	655	728
유량	m ³ /h	6 183	5 925	5 662	5 367	5 234	4 893	4 548	4 101	3 804	2 876
회전수	r/min	1 764	1 764	1 764	1 762	1 763	1 764	1 764	1 764	1 764	1 764
입력전력	kW	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.3

10. Drawing

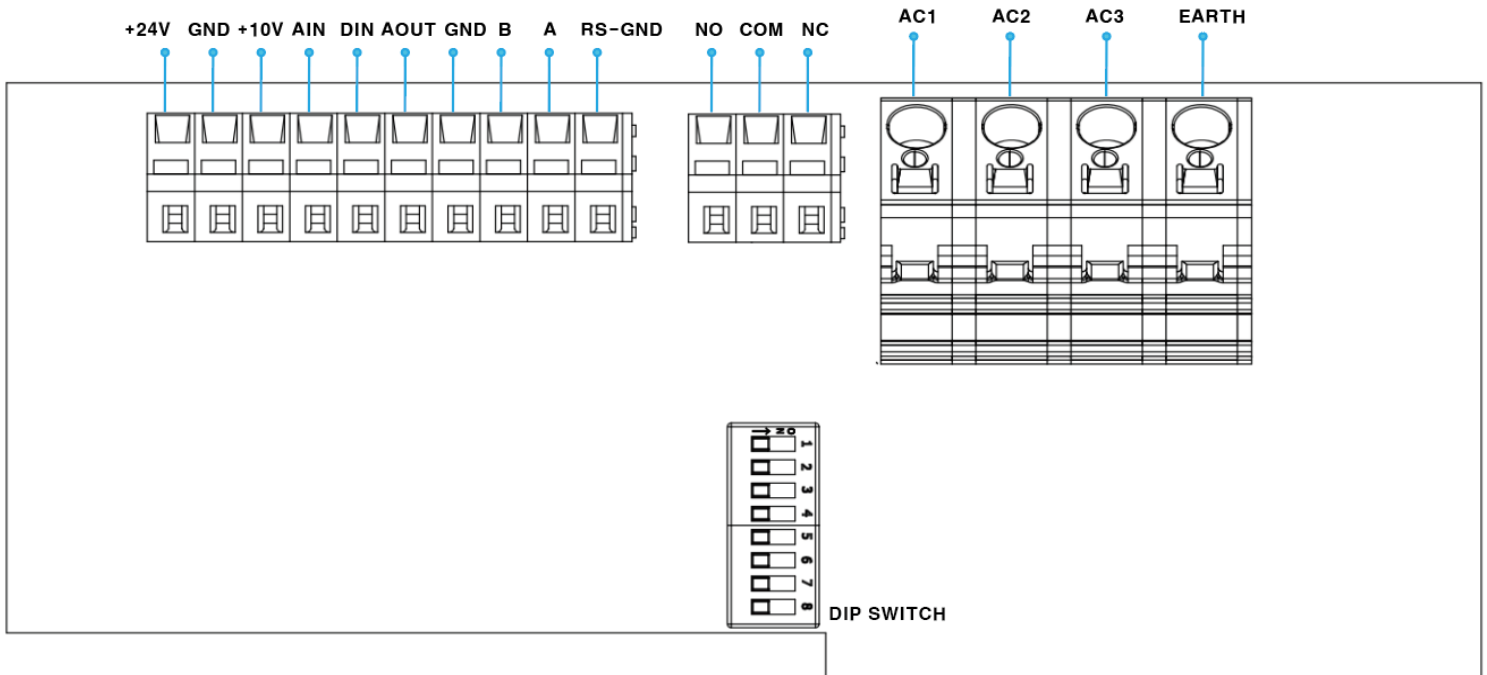


11. Motor Detail



SEUM-EC-SEREIS

12. PCB Connector



1. +24V	DC Voltage Output (500mA)
2. +10V	DC Voltage Output (500mA)
3. A, B, RS-G(Ground)	RS-485 (Modbus RTU)
4. AIN	0-10V Analog Control (10K Potentiometer)
5. DIN	Enable , Disable (VSP control)
6. AOUT	Speed Analog Output (0~100% = 0-10V)
7. DIP Switch	Device ID setting (Max 0~255 Channel)
8. Input Voltage	3Phase 380V 50/60hz
9. Earth	Earth

► (S-CU-450-E1-CB) Data Sheet Ver_1.0 (2024.12.03)

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