LG
Life's Good

# LG Therma V

# Aperçu de la gamme Therma V

PAC Monobloc
Moyenne Température

PAC Split
Moyenne Température

PAC Split
Haute Température

**NEW**

PAC Monobloc
R32

**NEW**

PAC Split
ECS intégrée

**NEW**

# Aperçu de la gamme Therma V

| | | Refri-gerant | Capa-city (kW) | 5 | 7 | 9 | 12 | 14 | 16 |
|---|---|---|---|---|---|---|---|---|---|
| Monobloc Mid Temp. (65℃) | | R32 | 1ø 220V | New  HM051M.U43 |  HM071M.U43 |  HM091M.U43 |  HM121M.U33 |  HM141M.U33 |  HM161M.U33 |
| | | | 3ø 380V | | | |  HM123M.U33 |  HM143M.U33 |  HM163M.U33 |
| Spilt Low Temp. (57℃) | Hydro Box Type | R410A | 1ø 220V | HN1616.NK3  HU051.U43 | HN1616.NK3  HU071.U43 | HN1616.NK3  HU091.U43 | HN1616.NK3  HU121.U33 | HN1616.NK3  HU141.U33 | HN1616.NK3  HU161.U33 |
| | | | 3ø 380V | | | | HN1639.NK3  HU123.U33 | HN1639.NK3  HU143.U33 | HN1639.NK3  HU163.U33 |
| | DHW Tank Integrated Type | | 1ø 220V | | | HN1616T.NB0  HU091.U43 | HN1616T.NB0  HU121.U33 | HN1616T.NB0  HU141.U33 | HN1616T.NB0  HU161.U33 |
| | | | 3ø 380V | | | | HN1616T.NB0  HU123.U33 | HN1616T.NB0  HU143.U33 | HN1616T.NB0  HU163.U33 |
| Split High Temp. (80℃) | | R410A + R134a | 1ø 220V | | | | | | HN1610H.NK2  HU161H.U32 |

# Focus Nouveautés 2018

PAC Monobloc
R32

**NEW**

# Nouveauté 2018 : Therma V – Monobloc R32

THERMA V R32 **Monobloc**

SCOP (35°C) ↗ : 4.45 / A+++

Plage de fonctionnement ↗ : −25 ~ 35°C

Nouvelle télécommande : RS3

Plus léger : 5,7,9kW : 90kg

Impact environnemental réduit

| | Refri-gérant | Capacité (kW) | 5 | 7 | 9 | 12 | 14 | 16 |
|---|---|---|---|---|---|---|---|---|
| Monobloc Moyenne Temp. (65°C) | R32 | 1ø 220V | New HM051M.U43 | HM071M.U43 | HM091M.U43 | HM121M.U33 | HM141M.U33 | HM161M.U33 |
| | | 3ø 380V | | | | HM123M.U33 | HM143M.U33 | HM163M.U33 |

# Nouveauté 2018 : Therma V – Monobloc R32

## Differences between R410A Monobloc and R32 Monobloc

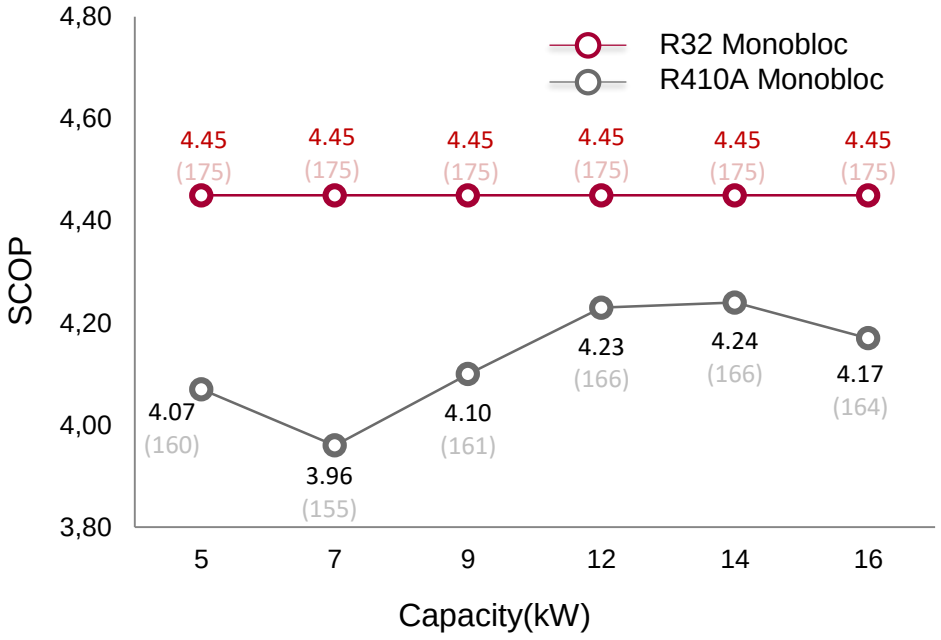
| Categories | Items | R410A Monobloc | R32 Monobloc | Remark |
|---|---|---|---|---|
| **Efficiency** | **SCOP (@ LWT 35℃) / Class** | 4.16 / A++ (16kW / 3Ph) | 4.45 / A+++ (All range) | Increased SCOP |
| **Component** | **Refrigerant** | R410A | R32 | Lower GWP application |
| | **Line up** | 1Ph : 3, 5, 7, 9, 12, 14, 16kW<br>3Ph : 12, 14, 16kW | 1Ph : 5, 7, 9, 12, 14, 16kW<br>3Ph : 12, 14, 16kW | 3kW drop |
| | **Compressor** | Rotary | New Type Scroll Compressor | New Tech Application |
| | **Pump (Brand)** | Wilo | Grundfos | EU Preference |
| | **Electric Heater** | Internal & Default | **External & Option (3, 6kW)** | Option Accessory |
| | **PHEX** | Gold Fin | Black Fin | Highly corrosion resistant |
| | **Dimension<br>H x W x D (mm)** | 5,7,9kW : 907 x 1,239 x 390<br>12,14,16kW : 1,450 x 1,239 x 390 | 5,7,9kW : 907 x 1,242 x 390<br>12,14,16kW : 1,450 x 1,242 x 390 | Almost same dimension |
| | **Weight** | 5,7,9kW : 97 ~ 99kg<br>12,14,16kW: 141 ~ 145kg | 5,7,9kW : 90kg<br>12,14,16kW: 135kg | Reduced weight |
| | **Interface (Remote Controller)** | RS2 | RS3 | Interface change |
| **Performance** | **Operation Range (Heating)** | -20 ~ 35℃ | **-25** ~ 35℃ | Range wider |
| | **Max. Leaving water temperature** | 57℃ | **65℃** | |
| | **Heating performance (@ LWT 55℃)** | 64% at -7 ℃ (16kW / 3Ph) | 100% @ -7 ℃ (All range)<br>81% @-15℃ (16kW / 3Ph) | Low Ambient Performance Improved |
| | **Noise (Max. Sound Power Level for Heating)** | 5kW : 63dB / 7kW : 65dB /<br>9kW : 67dB / 12,14,16kW: 68dB | 5,7,9kW : 60dB<br>12,14,16kW: 63dB | 5,7,9kW : Max. 7dB ↓<br>12,14,16kW: 5dB ↓ |

# Nouveauté 2018 : Therma V – Monobloc R32

The ErP directive is a key factor of selecting heating device in Europe heating market.
The R32 Monobloc type has an energy label rating A+++[1)] in ErP energy labelling regulation.

## SCOP

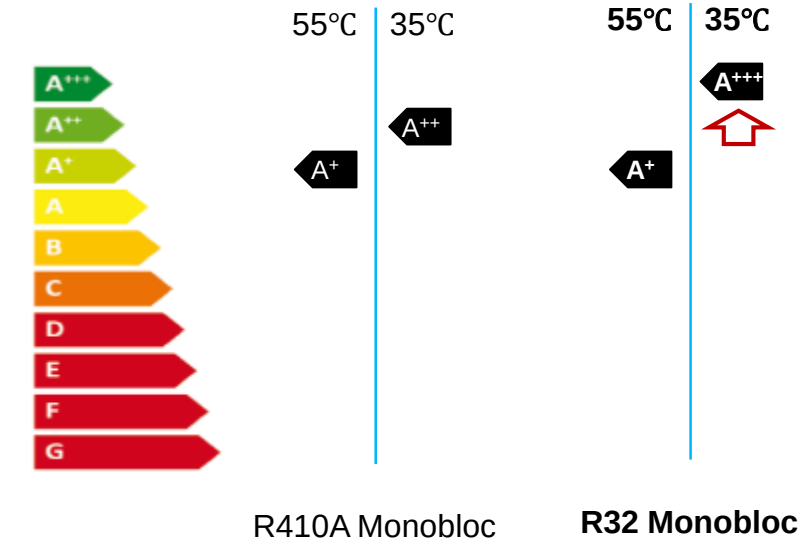
### SCOP improvement




※ Test Condition
Test procedure follows EN14825 (Average LWT 35℃)
Based on the single phase model line up

## ErP Energy Labeling

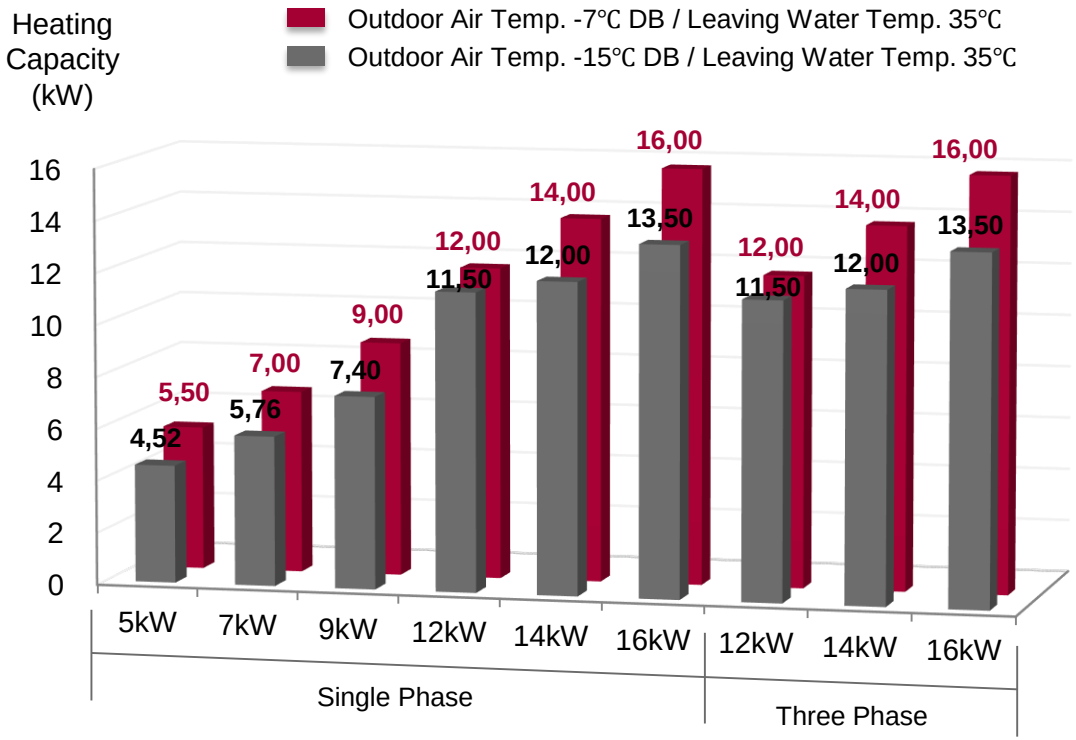
### Heating



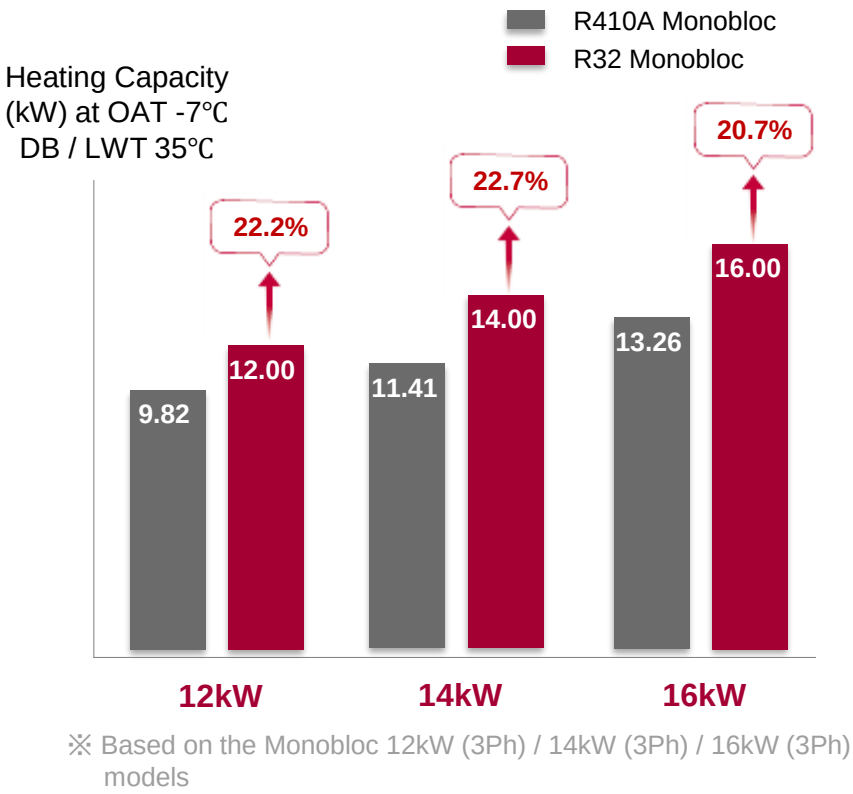

1) Seasonal space heating efficiency class at water outlet 35℃
※ This A+++ label is available from 26, Sep. 2019.

# Nouveauté 2018 : Therma V – Monobloc R32

The R32 Monobloc provides excellent heating performance – especially at Low Ambient Temperature.




**Heating Capacity of R32 Monobloc at Low Ambient Temperature**




※ Based on the Monobloc 12kW (3Ph) / 14kW (3Ph) / 16kW (3Ph) models

Heating Capacity at OAT -7℃ DB is same as normal capacity[1] and Heating Capacity at OAT -15℃ DB is more than 80% of normal capacity.

Heating capacity of R32 Monobloc At Low Ambient Temperature is improved more than 20% compared to R410A Monobloc.

1) Normal : Outdoor air temperature 7℃ DB / 6℃ WB, Water outlet temperature 35℃

# Nouveauté 2018 : Therma V – Monobloc R32

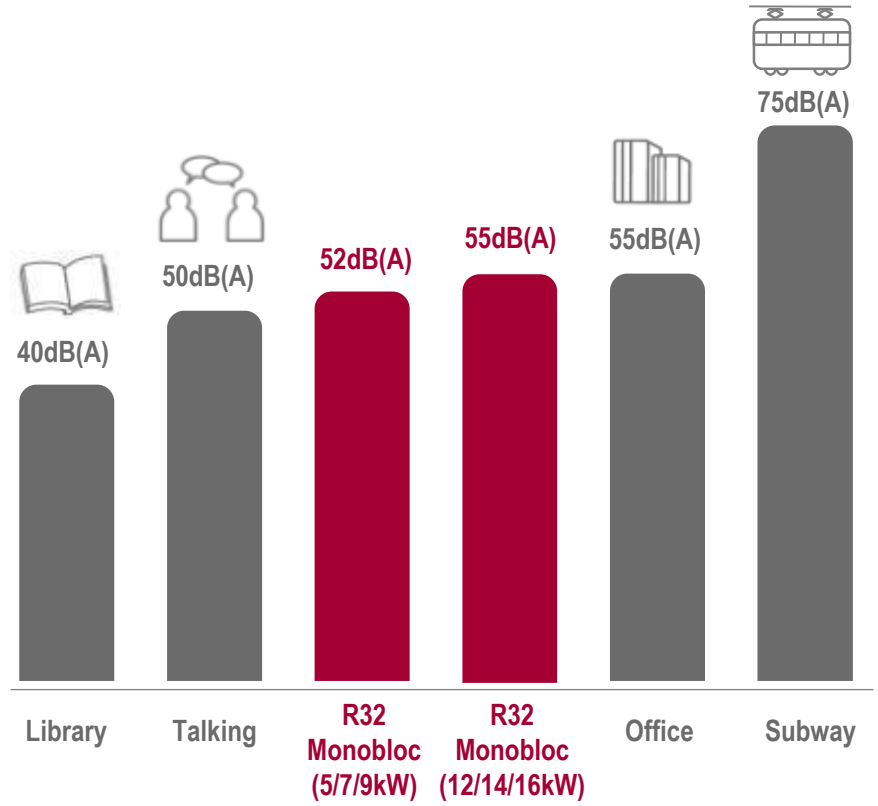
The R32 Monobloc reduces noise level compared to previous models.

## Operation Noise for Heating

(Unit : dB(A))

| Q'ty of Fan | | 1 Fan | | | 2 Fans | | |
|---|---|---|---|---|---|---|---|
| Line up (kW) | | 5 | 7 | 9 | 12 | 14 | 16 |
| R32 Monobloc | Sound Pressure Level (SPL)[1)] | 52 | 52 | 52 | 55 | 55 | 55 |
| | Sound Power Level (SWL) | 60 | 60 | 60 | 63 | 63 | 63 |
| R410A Monobloc | Sound Power Level (SWL) | 63 | 65 | 67 | 68 | 68 | 68 |

## Sound Pressure Level Comparison




1) This Sound Pressure Level is converted from Sound Power Level at 1m distance away.

# 2nd Heating Circuit

2 Zone (Day/Night Zone) Temperature Control through separate heating circuits is possible with mixing valve kit.

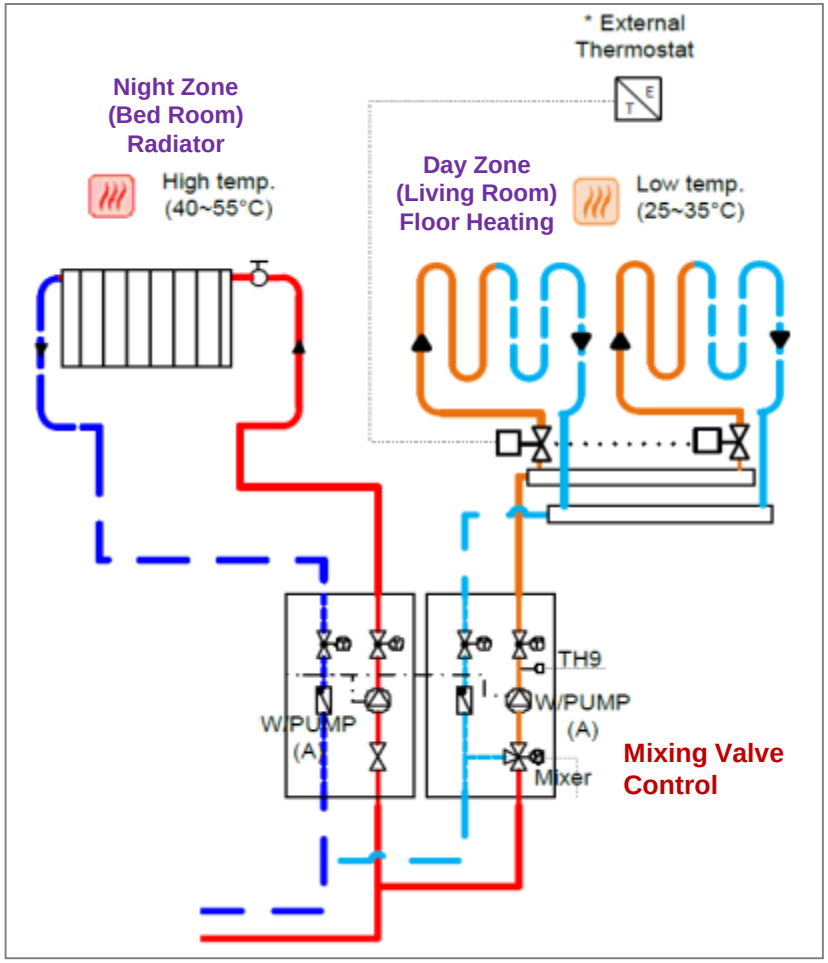
### ❑ 2 Zone Temperature Control



Setting Night Zone Temp.


Setting Day Zone Temp.

### ❑ 2nd Heating Circuit Diagram



# Various Temperature Control Options

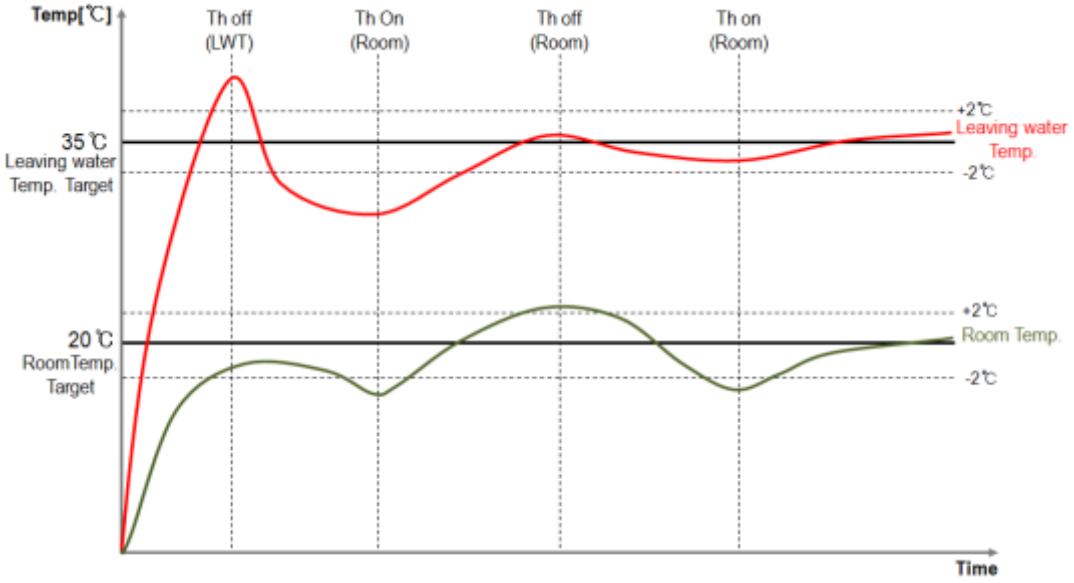
Various Temperature Control Options are possible for User's comfort and convenience. Especially for European life style that thermal comfort is preferred, Water Temp. + Room Temp. Control function is added.

① Leaving Water Temperature Control

New ② Entering Water Temperature Control

③ Room Temperature Control

New ④ Water Temp. + Room Temp. Control

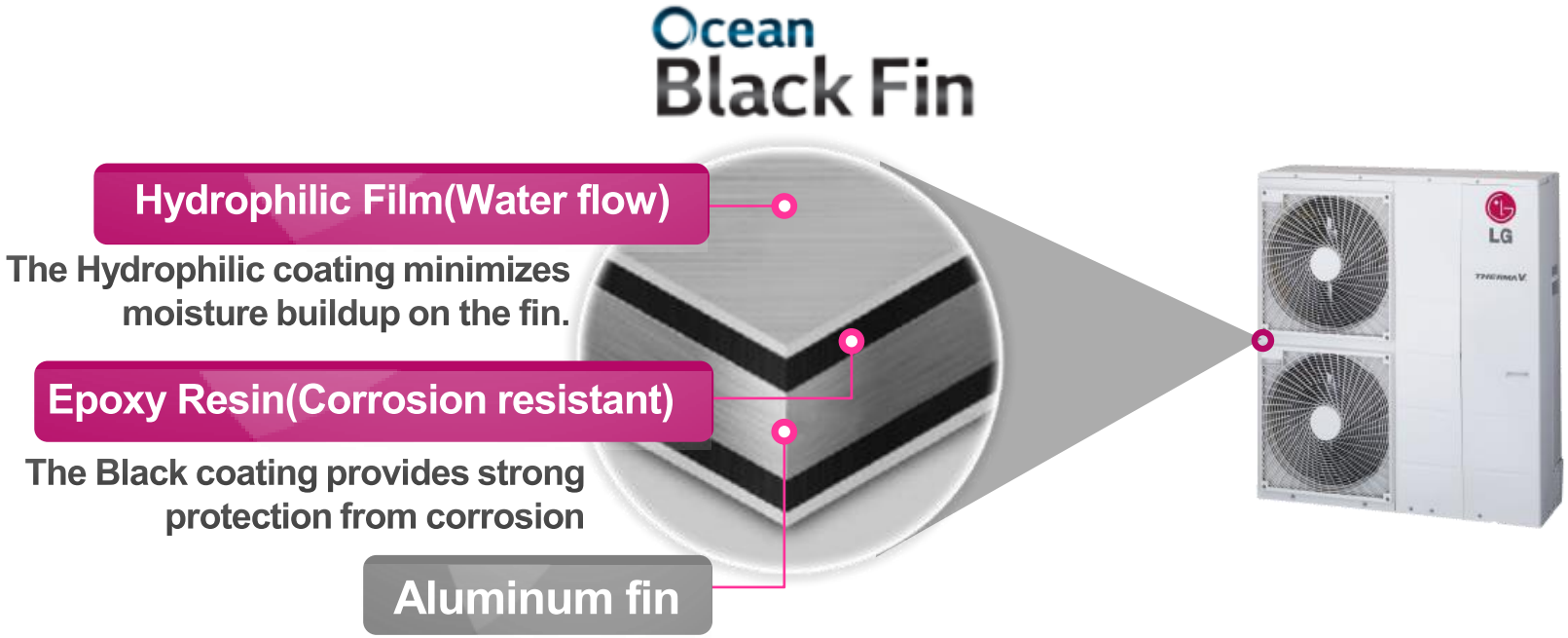


# Ocean Black Fin

‘Ocean Black Fin’ heat exchanger is highly corrosion resistant, designed to perform in corrosive environments such as contaminated and humid condition

**Longer Lifespan, Lower Operational Costs**

**Strengthened corrosion resistant coating**

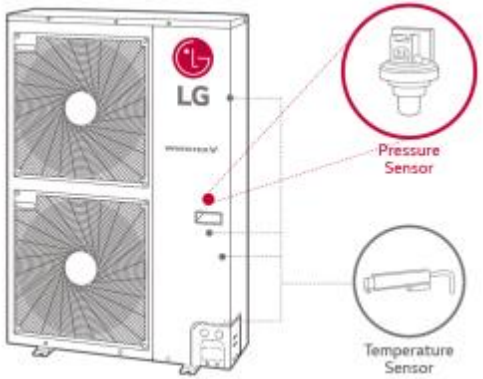


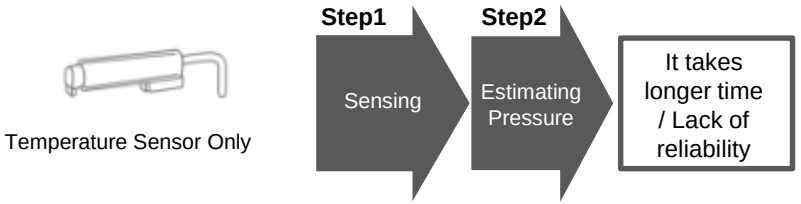
# Pressure Control & Quick Operating Response

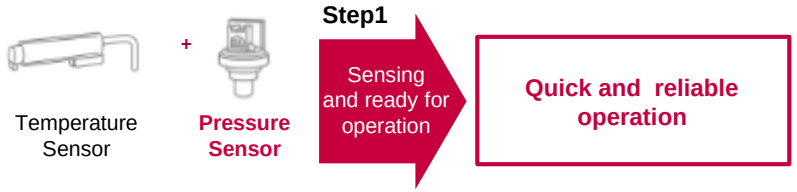
Pressure Control secures faster and more exact response than temperature control, so it reduces the time to reach the target water temperature by 44%.

## Faster and More exact with Pressure Control

Quick response due to sensing with ready for operation.
Ensures to reach target performance point without failing to keep a reliable operation.




## Quick Reaching to Target Temperature

Pressure control takes up to 44% less time to reach the desired water temperature with a high level of accuracy and stability