

Multi-Zone Charge Correction

Refrigerant to recover before start-up — based on ODU ports, liquid line length and connected indoor units



THE FORMULA

A · LINE

$$\text{Recover (oz)} = ((N \times 25) - L) \times 0.16$$

B · INDOOR UNITS

$$+ 5.3 \times T$$

A — unused factory line allowance, in ounces **B** — 5.3 oz per connected indoor unit ÷ 16 converts ounces to pounds

WHAT YOU NEED TO MEASURE

N

Number of ports on the ODU

Count every port, connected or not

PORTS

L

Total liquid line length

Sum of all installed liquid line runs

FT

T

Number of indoor units connected

IDUs actually installed on the system

IDUs

SYSTEM CONSTANTS (DO NOT CHANGE)

25

Factory line allowance per port

Charge covers 25 ft of liquid line per port

FT / PORT

0.16

Refrigerant per foot of liquid line

Converts unused feet to ounces

OZ / FT

5.3

Refrigerant per indoor unit

Applied once for every connected IDU

OZ / IDU

WORKED EXAMPLE

ASUM42 · 5-port ODU

N = 5 ports

L = 75 ft

T = 3 IDUs

1

Factory allowance

$N \times 25 = 5 \times 25$

125 ft

2

Unused line

$125 - L = 125 - 75$

50 ft

3

Term A

50×0.16

8.0 oz

4

Term B

$5.3 \times T = 5.3 \times 3$

15.9 oz

5

Recover

$A + B = 8.0 + 15.9$

23.9 oz

6

In pounds

$23.9 \div 16$

1.49 lb

RESULT

Recover **1.49 lb (23.9 oz)** of R-32 from this system before start-up.

JOB WORKSHEET

fill in on site

Ports on ODU

N

ports

$N \times 25$

factory line allowance

ft

Total liquid line installed

L

ft

$(N \times 25 - L) \times 0.16$

Term A

oz

Indoor units connected

T

IDUs

$5.3 \times T$

Term B

oz

Recover: A + B

oz

$\div 16 = \text{pounds}$

lb

QUICK REFERENCE

PORTS (N)		N × 25 ALLOWANCE	
2 ports		50 ft	
3 ports		75 ft	
4 ports		100 ft	
5 ports		125 ft	
Subtract installed line L from this value, then × 0.16.			

IDUS (T)		TERM B = 5.3 × T	
1 unit		5.3 oz	
2 units		10.6 oz	
3 units		15.9 oz	
4 units		21.2 oz	
5 units		26.5 oz	
Add Term A to this value for the total ounces to recover.			

NOTES

Rule of thumb: every 10 ft of unused allowance = 1.6 oz.

If Term A is zero or negative (installed line meets or exceeds N × 25 ft), the line set is not overcharged — see the installation manual for additional-charge guidance.

Use an R-32-rated recovery machine and a scale. Weigh the recovered charge — do not estimate.