

Mbsm.pro, LRA to Ton

Category: expertise

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How to Convert

LRA to TON

1 Phase

TOP COOLING SERVICE

Formula

$$\text{Ton} = \frac{\text{LRA}}{36}$$

$$\text{Ton} = \frac{54}{36}$$

TOP COOLING SERVICE

Ton = 1.5 Answer



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Determining the cooling capacity of air conditioning and refrigeration compressors is fundamental for professionals in the HVAC industry. One of the key electrical values specified on compressor labels is the LRA (Locked Rotor Amps), which represents the maximum current drawn at motor start. Transforming

this into tons of cooling provides a rapid and reliable way to size, diagnose, and upgrade systems.

What is LRA and Why Convert it to Tons?

- **Locked Rotor Amps (LRA):** The peak current when a compressor starts. It is vital for sizing electrical protection and understanding performance.
- **Cooling Ton:** Standard unit for cooling capability (1 ton = 12,000 BTU/hr).

The Simple Conversion Formula

For single-phase compressors, the modern, professional formula is:

$\text{Ton} = \text{LRA} / 36$

Example:

If the compressor's LRA is 54:

$\text{Ton} = 54 / 36 = 1.5 \text{ Ton}$

Always use the division symbol (/) instead of horizontal lines for cleaner, easier-to-read formulas in technical documentation.

Benefits and Use Cases

- **Quick Unit Sizing:** Helpful when label information is limited or during site evaluations.
- **Matching Electrical Loads:** Ensures new or replacement units are compatible with existing infrastructure.
- **Field Troubleshooting:** Arms technicians with a fast check for expected capacity vs. measured electrical consumption.

Suggested Keywords and Search Terms:

LRA to ton, LRA/ton conversion, LRA calculation formula, convert LRA to ton HVAC, mbsmgroup, mbsmgroup.tn, mbsmpro.com, mbsmpro, mbsm.pro, HVAC compressor sizing, refrigeration tonnage, locked rotor amps, HVAC Tunisia, modern formula HVAC

Combined Keywords Example:

LRA to ton HVAC, convert LRA to ton mbsmgroup, mbsmgroup.tn LRA formula, mbsmpro.com refrigeration capacity, mbsmpro LRA conversion, mbsm.pro ton calculator

Separated Keywords Example:

LRA, ton, formula, convert, compressor, cooling, calculation, mbsmgroup, mbsmgroup.tn, mbsmpro.com, mbsmpro, mbsm.pro, Tunisia

Summary:

This guide explains how to convert LRA into cooling tons using a direct and easy-to-use formula ($\text{LRA} / 36 = \text{Ton}$). It streamlines sizing, troubleshooting, and matching of commercial HVAC and refrigeration compressors, ensuring professional and efficient results in the field.

Slug:

convert-lra-to-ton-hvac-modern

Quick Reference Table: $\text{LRA} / 36 = \text{Ton}$

LRA Value Tons ($\text{Ton} = \text{LRA} / 36$)

36	1.0
45	1.25
54	1.5
72	2.0
90	2.5
108	3.0

By using this updated formula and professional writing style, technicians and engineers benefit from fast and transparent conversions that enhance reliability and accuracy in every HVAC task.

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