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REFRIGERANT HANDLING PRODUCTS

**RDA** ENVIRONMENTAL  
ENGINEERING LIMITED

# PROFESSIONAL WEIGH SCALE

Latest version of the original platform developed for safety in refrigerant handling. Still the best UK switching scale specified by end-users, oems, refrigeration and mechanical services contractors.



The RDA Professional **WEIGH SCALE** with switching function is designed for safe refilling of cylinders, charging and control of stock for all industrial applications and has the following unique features:

## FEATURES INCLUDE

Load capacity up to 120 kg

Switched socket outlet at 10 A

Adjustable trip point can be set to operate on either rising or falling weight

Rechargeable NiMH battery back-up for on-site weighing

Full-bridge centre-point load cell and digital amplifier for high resolution and accuracy

Low-profile robust steel construction with durable industrial paint finish

Touch-pad controls for ease of operation

Large digital LCD display

UNITS button toggles display between kg and lb/oz

HOLD button to interrupt transfer by temporarily de-energising outlet socket

Self-calibration and compensation for ambient temperatures between -20°C and +55°C

Carrying handle with cable winder

2 m mains lead with moulded plug

Safety overload stops and audible alarm

Hinged cover to protect the fascia

Full instructions displayed

# PROFESSIONAL WEIGH SCALE



The principal function of the scale is to accurately weigh cylinders when transfer of product [e.g. refrigerant] takes place during emptying or filling operations and to control the weight transferred by automatically switching at a pre-set level.

When recovering liquid refrigerant from plant or equipment a recovery cylinder can fill rapidly. For this reason, particularly with smaller cylinders, it is important to have accurate rapid response weight measurement.

The instrument in the RDA Professional Weigh Scale samples three times every second, achieving a high accuracy of displayed weight and trip point operation. For safety it is not recommended to fill refrigerant cylinders to more than 60% of the full capacity in order to allow a vapour space for expansion.

The only safe method of determining the amount of refrigerant or pressurised product contained in a cylinder is by measurement of gross weight. Calculate the maximum allowable gross weight by addition of the container tare weight and the maximum net fill stencilled on the container.

<b>Example for Large Refrigerant Cylinders</b>	<b>kg</b>
Tare Weight on Shroud	23
Max Net Fill Weight	50
<b>Total Maximum Allowable Gross Weight</b>	<b>73</b>

The RDA Professional Weigh Scale may be operated in one of three modes:

**Basic Scale** The scale will display the gross weight of the cylinders placed on the platform either when connected to the mains or powered by an integral battery. The weight of refrigerant in cylinders or product in partially-filled containers can thus be ascertained.

#### **Automatic trip on rise in weight**

This mode is used when operating the scale in conjunction with a refrigerant recovery unit or pump. The recovery unit or pump is powered via the mains socket on the fascia and the cylinder is placed on the platform. The operator is able to pre-set the switching point so that the mains supply to the socket switches at the safe weight limit for the cylinder. Where it is not practical to terminate flow by switching off power to the recovery unit or pump the weigh scale can be used to power a normally closed solenoid valve in the supply line to the cylinder.

#### **Automatic trip on fall in weight**

This mode allows the weigh scale to be used to control accurate charging applications or for controlling the transfer of product between cylinders.

## TECHNICAL SPECIFICATIONS

Range	0 to 120 kg
Weight Display Accuracy	+/- 10 g
Power Handling	10 A max (2 hp)
Voltage	230 V 50 Hz
Load cell rating	130 kg
Audible overload warning	100 kg
Rechargeable battery life	10 hours operation
<b>Overall Dimensions</b>	
Length	540 mm
Width	460 mm
Height	75 mm
Weight	13kg
<b>Alternative Supply Options</b>	
	110 V 50 Hz with BS 4343/CEE 17 plug and socket
	230 V 50 Hz with Schuko plug and socket

Manufactured by RDA Environmental Engineering in accordance with European Council Directives 89-393EEC (Machinery) 89-336EEC (EMC) and Low Voltage Directive EN 50081 Part 1 and EN 50082 Part 2

RDA Environmental Engineering manufactures a wide range of refrigerant handling products visit our website [www.rda-eng.com](http://www.rda-eng.com) or contact us for full details



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