



PRODUCT RANGE
DEHUMIDIFIERS

For drying rooms and storage facilities



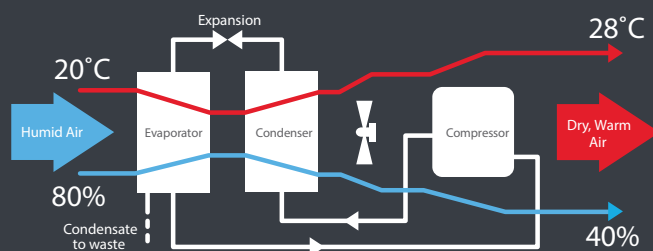
THE CHALLENGE

If a firefighter goes into any fire with damp clothes they could be putting their own lives at risk. Because of the hot temperatures they work in there is a good chance that the dampness of the clothing could turn into steam and subsequently burn and cause serious injury.

The solution

The high-performance dehumidifiers recirculate the air and physically remove moisture from it. This alleviates the need to continuously reheat incoming air. Not only that, the units convert energy taken out of the room as moisture to provide useful heat to warm the room, accelerating the drying process.

How a Calorex dehumidifier work



The process of dehumidification involves moisture-laden air being drawn into a dehumidifier where the air passes across a refrigerated coil. The air is rapidly cooled below its dew point, condensing the water vapour and recovering its latent heat energy for re-use. The cooled air is then passed across the condenser where it is reheated and returned to the served area at the required lower relative humidity.

Cost savings

Calorex dehumidifiers provide an efficient and cost effective alternative to drying using heat alone. The potential energy savings are huge as every unit of energy that a Calorex dehumidifier consumes, it will convert 2.5 times this amount to usable heat. In fact, compared to traditional heat and ventilation energy, cost savings of 75% are not unusual.

Installation

You can turn any room into a drying room just by using a Calorex dehumidifier. Installations can be straightforward, as it only requires positioning, connecting a power supply and drain. The units have combined heating and drying so there is no need for separate heaters, fans and extraction systems.

Our sales team can

- Provide sizing guidelines
- Provide dehumidifiers suitable for every size of drying room
- Provide measuring equipment

A photograph of a fire station locker room. Several firefighter jackets with reflective yellow and silver stripes are hanging on hooks inside red lockers. The scene is brightly lit, and the red color of the lockers is prominent.

Calorex dehumidifiers *are an essential product for fire and rescue services keeping Personal Protection Equipment (PPE) dry and safe to wear.*

DRYING ROOM SIZING GUIDE

Our sizing guide is based on tests performed in conjunction with the London Fire Brigade.

Typical unit selections for a fire station drying room

Heavy duty clothing

Dehumidifier model	Number of people using drying room
DH 15	Approx. 6-7 sets of clothing
DH 30	Approx. 12-15 sets of clothing
DH 60	Approx. 25-30 sets of clothing
DH 150	Approx. 70-75 sets of clothing

Normal duty clothing

Dehumidifier model	Number of people using drying room
DH 15	Approx. 9-10 sets of clothing
DH 30	Approx. 18-22 sets of clothing
DH 60	Approx. 37-45 sets of clothing
DH 150	Approx. 100-115 sets of clothing

Larger units are available

These unit selections are based on the following assumptions:

- Drying time – overnight period of 12-16 hours
- Room temperature – heated to a minimum of 18°C
- Ventilation – no additional mechanical ventilation

* Small extract fan to be fitted for dilution of odours

How we make the calculation

- The selection of a dehumidifier is related to the amount of wet clothing and equipment put into the drying room
- The amount of moisture to be removed needs to be known to make an accurate selection
- The number of people using the room gives an indication whilst the volume of the room is of secondary importance

Benefits

- High performance level, even in unheated rooms
- Powerful centrifugal fan
- Professional hot gas automatic defrost
- Automatic hygrostat controlled dehumidification
- Can connect to an external condensation drain or condensate pump
- Self contained

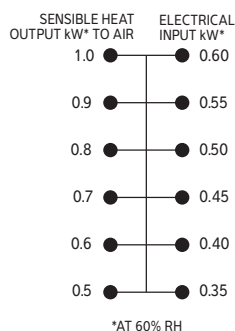
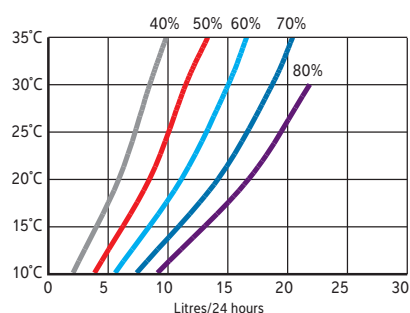
DEHUMIDIFIERS

WALL MOUNTED



DH 15

Performance data



Options

- Through the wall version



Features

- Self contained with fully automatic operation
- Integral humidistat
- Tamper proof controls
- Epoxy polyester painted zintec steel cabinet
- Hot gas defrost for low temperature operation
- Air filter

Applications

- Drying rooms
- Public buildings
- Changing rooms
- Store rooms
- Modular buildings
- Stairwells, cellars and basements
- Museums and galleries
- Unheated premises
- Garages

Specifications	Units	DH 15AX
Operating temperature range	°C	0-35
Dehumidification @ 30°C/60% RH	l/24h	15
Heat recovered to air @ 30°C/60% RH	kW	0.9
Air flow	m³/h	225
External static pressure	Pa	0
Sound pressure level @ 3m	dB(A)	53
Refrigerant		R407c
Power supply	V/Hz	230/1ph/50
Nominal power consumption	kW	0.43
FLA	A	3.8
Maximum supply fuse	A	10
LRA (compressor start)	A	18
Product size (w x d x h)	mm	825 x 363 x 320
Weight	kg	33
Condensate drain size (flexible plastic hose)	mm ID	10

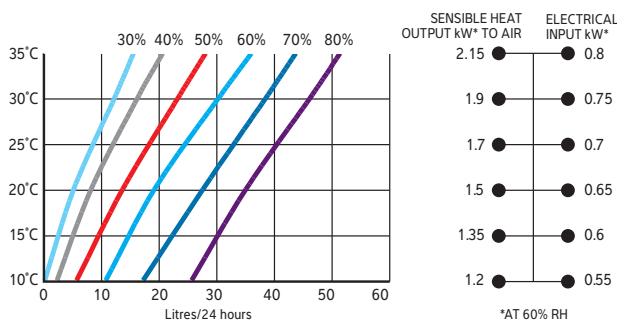
DEHUMIDIFIERS

WALL MOUNTED



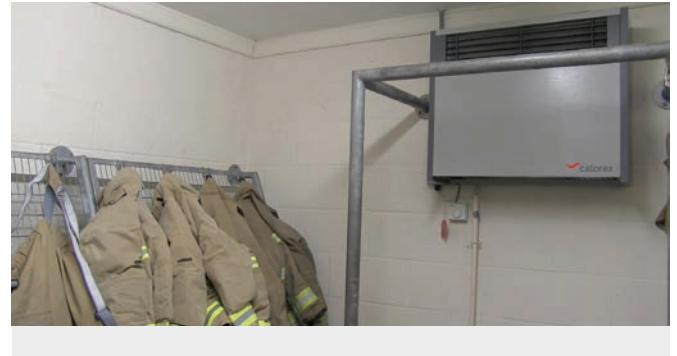
DH 30

Performance data



Options

- Through the wall version
- Electric air heater
- LPHW air heater
- Remote humidistat
- Floor stand kit



Features

- Self contained with fully automatic operation
- Integral humidistat
- Polyester coated evaporator and condenser
- Plastisol coated galvanised steel cabinet
- Hot gas defrost for low temperature operation
- Quiet centrifugal fans

Applications

- Drying rooms
- Modular buildings
- Electrical sub-stations
- Libraries
- Sports clubs
- Changing rooms
- Warehousing and storage
- Museums and galleries
- Garages



Specifications	Units	DH 30AX	DH 30AXP
Operating temperature range	°C	0-35	0-35
Dehumidification @ 30°C/60% RH	l/24h	30	30
Heat recovered to air @ 30°C/60% RH	kW	1.9	1.9
Air flow	m ³ /h	700	700
External static pressure	Pa	0	0
Sound pressure level @ 3m	dB(A)	52	52
Refrigerant		R407c	R407c
Power supply	V/Hz	230/1ph/50	230/1ph/50
Dehumidifier power input	kW	0.75	0.75
FLA	A	4.4	12.7
Maximum supply fuse	A	10	20
LRA (compressor start)	A	15.8	15.8
Heater type		Optional LPHW	Standard Electric
Heat output	kW	3.0	2.0
Flow rate	l/min	5.0	-
Product size (w x d x h)	mm	782 x 270 x 648	782 x 270 x 648
Weight	kg	40	40
Condensate drain size (flexible plastic hose)	mm ID	16	16

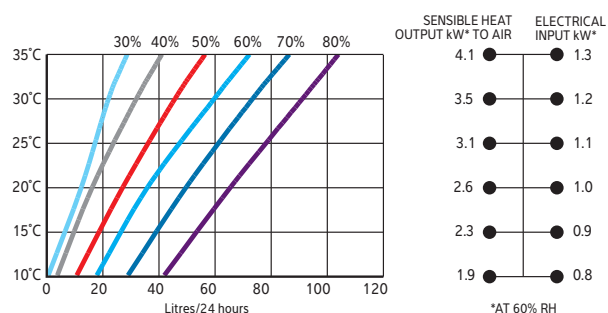
DEHUMIDIFIERS

WALL MOUNTED



DH 60

Performance data



Options

- Through the wall version
- Electric air heater
- LPHW air heater
- Remote humidistat
- Floor stand kit



Features

- Self contained with fully automatic operation
- Integral humidistat
- Polyester coated evaporator and condenser
- Plastisol coated galvanised steel cabinet
- Hot gas defrost for low temperature operation
- Quiet centrifugal fans

Applications

- Drying rooms
- Modular buildings
- Electrical sub-stations
- Libraries
- Sports clubs
- Changing rooms
- Warehousing and storage
- Museums and galleries
- Garages

Specifications	Units	DH 60AX	DH 60AXP
Operating temperature range	°C	0-35	0-35
Dehumidification @ 30°C/60% RH	l/24h	60	60
Heat recovered to air @ 30°C/60% RH	kW	3.5	3.5
Air flow	m³/h	1280	1280
External static pressure	Pa	0	0
Sound pressure level @ 3m	dB(A)	54	54
Refrigerant		R407c	R407c
Power supply	V/Hz	230/1ph/50	230/1ph/50
Dehumidifier power input	kW	1.2	1.2
FLA	A	7.5	24.2
Maximum supply fuse	A	13	32
LRA (compressor start)	A	30	30
Heater type		Optional LPHW	Standard Electric
Heat output	kW	5.0	4.0
Flow rate	l/min	5.0	-
Product size (w x d x h)	mm	1247 x 270 x 648	1247 x 270 x 648
Weight	kg	60	60
Condensate drain size (flexible plastic hose)	mm ID	16	16

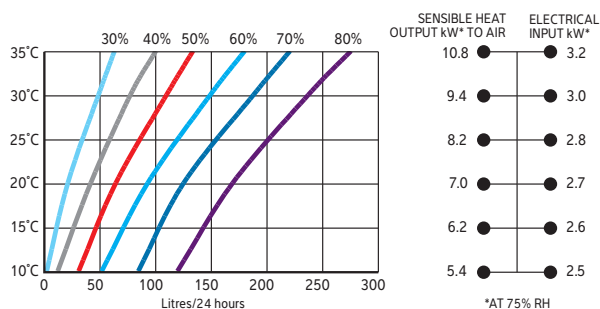
HIGH CAPACITY DEHUMIDIFIER

FLOOR STANDING



DH 150

Performance data



Features

- Self contained with fully automatic operation
- Integral humidistat
- High pressure fan, can be ducted
- Polyester coated evaporator and condenser
- Plastisol coated galvanised steel cabinet
- Hot gas defrost for low temperature operation
- Reverse cycle defrost for very low temperature operation

Options

- Top or rear fan outlet
- Condensate pump
- Compressor soft start
- Top discharge box with heater options
- Remote humidistat

Specifications	Units	DH 150AX	DH 150BX
Operating temperature range	°C	0-35	0-35
Dehumidification @ 30°C/60% RH	l/24h	150	150
Heat recovered to air @ 30°C/60% RH	kW	7.4	7.4
Air flow	m³/h	2500	2500
External static pressure	Pa	0-200	0-200
Sound pressure level @ 3m	dB(A)	58	58
Refrigerant		R407c	R407c
Power supply	V/Hz	230/1ph/50	400/3ph/50
Nominal power consumption	kW	2.5	2.5
FLA (electrical)	A	21	11
Maximum supply fuse	A	30	16
LRA (compressor start)	A	61	30
LRA (compressor soft-start)	A	28	13
Heater type	Optional	Top box electric	Top box electric
Heat output	kW	9	9
Power supply	V/Hz	230/1ph/50	400/3ph/50
FLA (heater)	A	36	12
Maximum fuse size	A	50	16
Product size (w x d x h)	mm	660 x 660 x 1313	660 x 660 x 1313
Weight	kg	130	130
Condensate drain size (flexible plastic hose)	BSPM	¾	¾

