### **BUREAU OF INDIAN STANDARDS**

### **Program of Work**

### MED 3: Refrigeration And Air Conditioning

Scope:

a) Formulation of standards for refrigeration and air- conditioning equipment and appliances including terminology, definitions and symbols, designation of refrigerants, testing of refrigerating systems; and refrigerating units. b) Co-ordination of work with ISO/TC 86 Refrigeration and Air conditioning; ISO/TC 142 Cleaning equipment for air and other gases; IEC/TC 61 Safety of household appliances for refrigeration and air- conditioning and IEC TC 59/SC 59M Performance of Electrical Household and Similar Cooling and Freezing Appliances.

Liaison:

TC-142 (P): Cleaning equipment for air and other gases TC-86 (P): Refrigeration and air-conditioning TC-86 SC-1 (P): Safety and environmental requirements for refrigerating systems TC-86 SC-4 (P): Testing and rating of refrigerant compressors TC-86 SC-6 (P): Testing and rating of air-conditioners and heat pumps TC-86 SC-7 (P): Testing and rating of commercial refrigerated display cabinets TC-86 SC-8 (P): Refrigerants and refrigeration lubricants IEC TC-59 SC-59M (P): Performance of electrical household and similar cooling and freezing appliances IEC TC-61 SC-61C (P): Safety of refrigeration appliances for household and commercial use IEC TC-61 SC-61D (P): Appliances for air-conditioning for household and similar purposes

### **Published Standards**

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10594 : 2021	Specification for Thermostatic		-	Indigenous
		Expansion Valves			
2	IS 10617 : 2018	Hermetic compressors -	May, 2022	1	Indigenous
		Specification (Second Revision)			
	Reviewed In: 2022				
3	IS 11327 : 2022	Requirements for Refrigerants		-	Indigenous
		Condensing Units (Second			
		Revision)			
4	IS 11328 : 2022	Self-contained Automatic Ice		-	Indigenous
		Makers Specification (First			
		Revision)			
5	IS 11329 : 2018	Finned type heat exchanger for	May, 2022	2	Indigenous
		room air conditioner (First			
	Reviewed In: 2022	Revision)			
6	IS 11330 : 2021	Refrigeration Oil Separator		-	Indigenous
		General Specification Construction			
		Requirements and Testing			
7	IS 11561 : 2018	Code of practice for testing of	May, 2022	- Indigenous	
		water cooling towers (First			
	Reviewed In: 2022	Revision)			
8	IS/ISO 11650 : 1999	Performance of refrigerant	September, 2022	-	Identical under single
		recovery and/or recycling			numbering

	Reviewed In : 2022 ISO 11650 : 1999	equipment			
9	IS 11951 : 2009	PUMPSET FOR DESERT	September, 2022	-	Indigenous
	11951	COOLERS - SPECIFICATION (	1 ,		
	Reviewed In: 2022	First Revision)			
10	IS 11951 : 2024	PUMPSET FOR DIRECT		-	Indigenous
		EVAPORATIVE AIR COOLER â€" SPECIFICATION (Second			
		Revision)			
11	IS 12249 : 2021	Specification for Desiccant Driers		-	Indigenous
		-			
12		Road Vehicles Refrigerant Systems		-	Identical under single
	ISO 13043:2011 ISO 13043:2011	used in Mobile Air Conditioning			numbering
	150 15045:2011	Systems MAC Safety Requirements Adoption of ISO			
		13043:2011			
13	IS/ISO 13261-1:	Sound power rating of air -	August, 2021	-	Identical under dual
	1998	Conditioning and air - Source heat			numbering
	ISO 13261-1 : 1998	pump equipment: Part 1 non -			
	Reviewed In: 2021 ISO 13261-2:1998	Ducted outdoor equipment			
14	IS/ISO 13261-2:	Sound power rating of	September, 2022	-	Identical under single
	1998	airConditioning and air - Source	•		numbering
		heat pump equipment: Part 2 non -			
	Reviewed In: 2022	Ducted indoor equipment			
	ISO 13261 : Part 2 : 1998				
15	IS 1391 (Part 1):	Room air conditioners -	January, 2022	4	Indigenous
	2017	Specification: Part 1 unitary air			
	D : 11 2022	conditioners (Third Revision)			
16	Reviewed In : 2022 IS 1391 (Part 1) :	Room Air Conditioners		_	Indigenous
10	2023	Specification Part 1 Unitary Air			margenous
		Conditioners Fourth Revision			
17	IS 1391 (Part 2):	Room air conditioners -	May, 2022	4	Indigenous
	2018	Specification: Part 2 split air			
	Reviewed In: 2022	conditioners (Third Revision)			
18	IS 1391 (Part 2):	Room Air Conditioners		_	Indigenous
	2023	Specification Part 2 Split Air			
		Conditioners Fourth Revision			
19	IS 14618 : 2022	Automotive vehicles Air-		-	Indigenous
		conditioning and heating systems thermal performance Method of			
		measurement (Second Revision)			
20	IS 1474 : 1959	Specification for commercial	May, 2022	-	Indigenous
	Reviewed In: 2022	refrigerators			
21	IS 1475 (Part 1):	Self - Contained drinking water	January, 2022	-	Indigenous
	2001 Reviewed In : 2022	coolers - Specification: Part 1 energy consumption and			
	Reviewed III . 2022	performance (Third Revision)			
22	IS 16590 : 2023	Liquid Chilling Package Units -		-	Indigenous
		Specification (First Revision)			
23	IS 16590 : 2017	Water cooled chilling packages	February, 2022	1	Indigenous
	Reviewed In: 2022	using the vapour compression cycle - Specification			
24	IS 16656 : 2017	Refrigerants - Designation and	April, 2021	2	Identical under dual
-	ISO 817 : 2014	safety classification	p, <b>-</b> - <b>-</b>		numbering
	Reviewed In: 2021				
I	l	ı		I	I

l	ISO 817 : 2014				
25		Refrigerated display cabinets: Part	April, 2021	-	Identical under dual
	2017	1 vocabulary	•		numbering
	ISO 23953-1 : 2015				
	Reviewed In: 2021				
	ISO 23953-1: 2015				
26		Refrigerated display cabinets: Part	April, 2021	-	Identical under dual
	2017	2 classification, requirements and			numbering
	ISO 23953-2 : 2015	test conditions			
	Reviewed In : 2021				
27	ISO 23953-2 : 2015	Defice meting Systems and Heat	May 2022	2	Identical under dual
21	IS 16678 (Part 1): 2018	Refrigerating Systems and Heat Pumps â€" Safety and	May, 2022	2	numbering
	ISO 5149-1 : 2014	Environmental Requirements Part			numbering
	Reviewed In : 2022	1 Definitions, Classification and			
	ISO 5149 Pt 1:2014				
28	IS 16678 (Part 2):	Refrigerating systems and heat	May, 2022	1	Identical under dual
	2018	pumps - Safety and environmental			numbering
	ISO 5149-2 : 2014	requirements: Part 2 design,			
	Reviewed In: 2022	construction, testing, marking and			
	ISO 5149 Pt 2:2014				
29	IS 16678 (Part 3):	Refrigerating systems and heat	May, 2022	1	Identical under dual
	2018	pumps - Safety and environmental			numbering
	ISO 5149-3 : 2014	requirements: Part 3 installation			
	Reviewed In: 2022	site			
20	ISO 5149 Pt 3:2014		N. 2022		T1 2 1 1 1 1
30	IS 16678 (Part 4): 2018	Refrigerating systems and heat	May, 2022	-	Identical under dual
	ISO 5149-4 : 2014	pumps - Safety and environmental requirements: Part 4 operation,			numbering
	Reviewed In : 2022	maintenance, repair and recovery			
	ISO 5149 Pt 4:2014	± * *			
31	IS 16753 (Part 1):	High Efficiency Filters and Filter		-	Identical under dual
	2022	Media for removing Particles from			numbering
	ISO 29463-1:2017	Air Part 1 Classification			
	ISO 29463-1:2017	Performance Testing and Marking			
		First revision			
32	IS 16753 (Part 2):	High - Efficiency filters and filter	May, 2022	-	Identical under dual
		media for removing particles in air:			numbering
	ISO 29463-2 : 2011	Part 2 aerosol production,			
		measuring equipment and particle -			
	ISO 29463-2 :2011	Counting statistics	M 2022		Tilendie den den des 1
33		High - Efficiency filters and filter media for removing particles in air:	May, 2022	-	Identical under dual numbering
		Part 3 testing flat sheet filter media			numbering
	Reviewed In : 2022	and 5 tosting that shoot fitter metha			
	ISO 29463-3:2011				
34	IS 16753 (Part 4):	High - Efficiency filters and filter	May, 2022	-	Identical under dual
		media for removing particles in air:	<b>J</b> /		numbering
	ISO 29463-4 : 2011	Part 4 testing method for			
	Reviewed In: 2022	determining leakage of filter			
	ISO 29463-4:2011	elements - Scan method			
35	IS 16753 (Part 5):	High - Efficiency filters and filter	May, 2022	-	Identical under dual
		media for removing particles in air:			numbering
	ISO 29463-5 : 2011	Part 5 test method for filter			
	Reviewed In: 2022	elements			
	IS 16753 (Part 5)/ISO 29463-5				
36	IS 16753 (Part 5):	High-Efficiency Filters and Filter		_	Identical under dual
50	2024	Media for Removing Particles in		_	numbering
	2021			1	l lumbering

1	IS 16753 (Part	Air Part 5 Test Method for Filter	l I		ĺ
	5)/ISO 29463-5	Elements (First Revision)			
	IS 16753 (Part				
	5)/ISO 29463-5				
37	IS 17550 (Part 1):	HOUSEHOLD		-	Indigenous
	2021	REFRIGERATING			C
		APPLIANCES			
		CHARACTERISTICS AND TEST	1		
		METHODS Part 1 General			
		Requirements			
38	IS 17550 (Part 2):	Household Refrigerating		-	Modified/Technically
	2021	Appliance- Characteristics and test			Equivalent
	IEC 62552-2: 2015	methods Part 2 Performance			
		requirements			
39	IS 17550 (Part 3):	Household Refrigerating		-	Modified/Technically
	2021	Appliance- Characteristics and test			Equivalent
	62552-3	methods Part 3 Energy			
		Consumption and volume			
40	IS 17570 (Part 1):	Air Filters for general ventilation		-	Identical under dual
	2021	Part 1 Technical specifications			numbering
	ISO 16890-1:2016	requirements and classification			
	ISO 16890-2:2016	system based upon particulate			
		matter efficiency ePM Adoption of			
<u></u>	72.1-7-0.75	ISO 16890-1:2016			
41	IS 17570 (Part 2):	Air Filters for general ventilation		-	Modified/Technically
	2021	Part 2 Measurement of fractional			Equivalent
	ISO 16890-2:2016	efficiency and air flow resistance			
		Modified adoption of ISO			
12	IC 17570 (D-++ 2)	16890-2:2016			T.1
42	IS 17570 (Part 3):	Air Filters for general ventilation Part 3 Determination of the		-	Identical under dual
	2021 ISO 16890-3:2016				numbering
	ISO 16890-3:2016	gravimetric efficiency and the air flow resistance versus the mass of			
	130 10890-3:2010	test dust captured ( adoption of			
		ISO 16890-3:2016)			
43	IS 17570 (Part 4):	Air Filters for general ventilation			Identical under dual
75	2021	Part 4 Conditioning method to			numbering
	ISO 16890-4:2016	determine the minimum fractional			namouring
	ISO 16890-4:2016	test efficiency (adoption of ISO			
	150 10070 112010	16890-4:2016)			
44	IS/ISO 17584 : 2022	· · · · · · · · · · · · · · · · · · ·		-	Identical under single
	IS/ISO 17584	Revision)			numbering
	IS/ISO 17584	Í			C
45	IS 17681 : 2022	Specification for Bottled water		1	Indigenous
		dispensers			C
46	IS 17693 : 2022	Non-electric Cooling Cabinet		-	Indigenous
L		Made of Clay	<u> </u>		
47	IS 17773 : 2022	Closed-Circuit Ammonia		-	Indigenous
		Refrigeration System â€" Code of			
		Practice for Design and Installation			
		(ANSI/IIAR 2 : 2014, NEQ)			
48	IS 18154 (Part 1):	Air-cooled air conditioners and air-		-	Modified/Technically
	2023	to-air heat pumps Testing and			Equivalent
	ISO 16358-1	calculating methods for seasonal			
		performance factors Part 1:			
		Cooling seasonal performance			
		factor ISO 16358-1 : 2013 MOD			
49		Air-cooled air conditioners and air-		-	Identical under dual
	2023	to-air heat pumps Testing and			numbering
I	I	1	ı		I

	ISO 16358-2 ISO 16358-2	calculating methods for seasonal performance factors Part 2: Heating seasonal performance factor			
50	2023 ISO 16358-3	Air-cooled air conditioners and air- to-air heat pumps Testing and calculating methods for seasonal performance factors Part 3: Annual performance factor		-	Identical under dual numbering
51	IS 18801 : 2023 ISO 22041:2019 ISO 22041:2019	Refrigerated storage cabinets and counters for professional use Performance and energy consumption		-	Identical under dual numbering
52	IS 18802 : 2023 ISO 22042:2021 ISO 22042:2021	Blast chiller and freezer cabinets for professional use Classification requirements and test conditions		-	Identical under dual numbering
53	IS 2167 : 2019	Specification for bottle coolers (Second Revision)	-	-	Indigenous
54	IS 2370 : 2014 Reviewed In : 2019	Walk - In cold rooms - Specification (First Revision)	June, 2019	-	Indigenous
55	IS 302 (Part 2/Sec 24): 1994 IEC 60335-2-24 Reviewed In: 2014 IEC Pub 335-2-24 ( 1992)	Safety of household and similar electrical appliances: Part 2 particular requirements: Sec 24 refrigerators, food - Freezers and ice - Makers		-	Modified/Technically Equivalent
56	IS 3315 : 2019	Evaporative air coolers (Desert Coolers) - Specification (Third Revision)	-	-	Indigenous
57	IS 3615 : 2020	Glossary of Terms Used in Refrigeration and Air Conditioning ( Second Revision )	-	-	Indigenous
58	IS 4831 : 2019	Recommendation on units and symbols for refrigeration (First Revision)	-	-	Indigenous
59	IS 5111 : 1993 ISO 917 Reviewed In : 2022 ISO 917 : 1999	Testing of refrigerant compressors (First Revision)	May, 2022	-	Identical under dual numbering
60	IS 60335 (Part 2/Sec 34): 2021 IEC 60335-2-34: 2021 IEC 60335-2-34: 2021	Household and similar electrical appliances Safety Part 2-34: Particular requirements for motor- compressors Adoption of IEC 60335-2-34: 2021		-	Identical under single numbering
61	IS/IEC 60335-2-40) : 2018 IEC 60335-2-40 IEC 60335-2-40	Household and similar electrical appliances safety: Particular requirements for electrical heat pumps air-conditioners and dehumidifiers Adoption of IEC 60335-2-40		-	Identical under dual numbering
62	IS/IEC 60335-2-89: 2010 IEC 60335-2-89: 2010 Reviewed In: 2023 IEC 60335-2-89:2010	Household and similar electrical appliances - Safety: Part 2 - 89: particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor	April, 2023	-	Identical under dual numbering

63	IS 655 : 2006 Reviewed In : 2022 ISO 7807: 1983	Air ducts - Specification (Second Revision)	January, 2022	2	Not Equivalent
64	IS 7613 : 1975 Reviewed In : 2017	Method of testing panel type air filters for air - Conditioning and ventilation purposes	March, 2017	- Indigenous	
65	IS 7872 : 2020	Deep Freezers - Specification ( Second Revision )	_	1	Indigenous
66	IS 7896 : 2023	Air Conditioning Outdoor Design Conditions Data for Indian Cities (Second Revision)		- Indigenous	
67	IS/ISO 8066-2: 2001 ISO 8066-2:2001 ISO 8066-2:2001	Rubber and Plastics Hoses and Hose Assemblies for Automotive Air Conditioning Specification Part 2 Refrigerant 134a Adoption of ISO 8066-2:2001		-	Identical under single numbering
68	IS 8066 (Part 3): 2020 ISO 8066-3:2020 ISO 8066-3:2020	Rubber and Plastics Hoses and Hose assemblies for Automotive Air Conditioning Specification Part 3 Refrigerant 1234yf Adoption of ISO 8066-3:2020		-	Identical under single numbering
69	IS 8148 : 2018  Reviewed In : 2022  ISO 13253 : 2017  ISO 16358 (Part 1) : 2013	Ducted and package air - Conditioners - Specification (Second Revision)	May, 2022	1	Not Equivalent

# **Standards under Development**

	Projects Approved					
SI. No.	SI. No. Doc No. Title					
	No Records Found					

	Preliminary Draft Standards				
SI. No.	SI. No. Doc No. Title				
No Records Found					

	Drafts Standards in WC Stage				
SI. No.	SI. No. Doc No. Title				
No Records Found					

	Draft Standards Completed WC Stage				
SI. No.	Doc No.	Title			
1	MED 3 (19119)	Non-Ducted Portable Air-Cooled Air Conditioners And Air-to-Air Heat Pumps Having A Single			
		Exhaust Duct Testing And Rating For Performance			
2	MED 3 (19252)	Refrigerated display cabinets Part 2 Classification requirements and test conditions ISO 23953-2			
		2015 MOD			
3	MED 3 (22144)	Refrigerating systems and heat pumps Competence of personnel			
4	MED 3 (22778)	Electronic Expansion Valve - Specification			
5	MED 3 (24952)	ADJUSTED VOLUME CALCULATION FOR REFRIGERATING APPLIANCES Adoption of			
		IEC TR 63061			
6	MED 3 (25074)	Air Filters for General Ventilation Part 4 Conditioning Method to Determine the Minimum			

	Finalized Draft Indian Standard					
SI. No.	Doc No.	Title				
1	MED 3 (22237) Revision	Household Refrigerating Appliances - Characteristics and Test Methods Part 3 Energy				
	of: IS 17550:2021	Consumption and Volume First Revision				
2	MED 3 (25447) Revision	REFRIGERATION AND AIR CONDITIONING GLOSSARY OF TERMS Third Revision				
	of: IS 3615:2020					

		Finalized Draft Indian Standards under Print
SI. No.	Doc No.	Title
1	MED 3 (17393)	Air Handling Units - Specification
2	MED 3 (18921)	Multiple split-system air conditioners and air-to-air heat pumps VRF air conditioners -
		Specification
3	MED 3 (19768)	Finned type heat exchanger for room air conditioner First Revision Amendment - 3
4	MED 3 (21813) Revision	Refrigerating Systems and Heat Pumps - Safety and Environmental Requirements Part 4
	of: IS 16678:2018	Operation Maintenance Repair and Recovery First Revision
5	MED 3 (22200) Revision	Drinking Water Coolers - Specification Fourth Revision
	of: IS 1475:2001	
6	MED 3 (22235) Revision	Household Refrigerating Appliances - Characteristics and Test Methods Part 1 General
	of: IS 17550:2021	Requirements First Revision
7	MED 3 (22236) Revision	Household Refrigerating Appliances - Characteristics and Test Methods Part 2 Performance
	of: IS 17550:2021	Requirements First Revision
8	MED 3 (22387) Revision	Direct Evaporative Air Cooler - Specification Fourth Revision
	of: IS 3315:2019	
9	MED 3 (22552)	Commercial Beverage Coolers - Classification Requirements and Test Conditions Third Revision
10	MED 3 (24169)	Household and Similar Electrical Appliances - Safety Part 2-89 Particular Requirements for
		Commercial Refrigerating Appliances and Ice-Makers with an Incorporated or Remote Refrigerant
		Unit or Motor-Compressor IEC 60335-2-89 2019 MOD

### Total Published Standards:59 Total Standards Under development:18

### **Aspect Wise Report**

Product: 34
Code of Practices: 2
Methods of Test: 16
Terminology: 3
Dimensions: 0
System Standard: 1
Safety Standard: 2
Others: 6

Others: 6 Service Specification: 0 Process Specification: 0 Unclassified: 0

## Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 10609 : 1983	Refrigerants - Number designation
	ISO 817	
	Reviewed In: 2009	
2	IS 10617 (Part 1): 1983	Specification for Hermetic Compressors - Part 1 High Temperature Application Group
	Reviewed In: 2007	
3	IS 10617 (Part 2): 1983	Hermetic Compressors - Part 2 Medium Temperature Application group
	Reviewed In: 2012	
		Hermetic Compressors - Part 3 Low Temperature Application Group

	1	!
4	IS 10617 (Part 3): 1983	
	Reviewed In: 2012	
5	IS 11338 : 1985	Thermostats for Use in Refrigerators Air Conditioners Water Coolers and Beverage Coolers
	Reviewed In: 2013	
6	IS 1476 (Part 1): 2000	Performance of household refrigerating appliance - Refrigerators with or without low temperature
	Reviewed In: 2021	compartment Part 1 energy consumption and performance Third Revision
7	IS 15750 : 2006	Household frost - Free refrigerating appliances - Refrigerators cooled by internal forced air
	Reviewed In: 2022 ISO	circulation - Characteristics and test methods - Specification
	15502:2005	
8	IS 1869 : 1961	Specification for ice cans
	Reviewed In: 2017	
9	IS 2374 : 1963	Specification for ice tanks
	Reviewed In: 2017	
10	IS 3621 : 1966	Domestic Refrigerators absorption Type
	Reviewed In: 1991	
11	IS 5038 : 1969	Specification for ice cube trays for domestic refrigerators
	Reviewed In: 2017	
12	IS 659 : 1964	Safety code for air conditioning
	Reviewed In: 2017	
13	IS 660 : 1963	Safety code for mechanical refrigeration
	Reviewed In: 2017	
14	IS/ISO 817 : 2005	Refrigerants Designation System
	Reviewed In: 2017 IS	
	16656:2017/ISO 817:2014	
15	IS 9210 : 1979	Refrigerated Display Cabinets
	Reviewed In: 2017	

## **Annexure-II :List of Indian Product Standards**

SI. No.	IS No. & Year	Title
1	IS 10594 : 2021	Specification for Thermostatic Expansion Valves
	ISO/IEC TR 19795-3:2	
2	IS 10617 : 2018	Hermetic compressors - Specification Second Revision
	Reviewed In: 2022	
3	IS 11327 : 2022	Requirements for Refrigerants Condensing Units Second Revision
	ISO 6789-1 : 2017	
4	IS 11328 : 2022	Self-contained Automatic Ice Makers Specification First Revision
	ISO 8000-120 : 2016	
5	IS 11329 : 2018	Finned type heat exchanger for room air conditioner First Revision
	Reviewed In: 2022	
6	IS 11330 : 2021	Refrigeration Oil Separator General Specification Construction Requirements and Testing
	63042-301	
7	IS 11951 : 2024	PUMPSET FOR DIRECT EVAPORATIVE AIR COOLER SPECIFICATION Second Revision
8	IS 12249 : 2021	Specification for Desiccant Driers
	IEC TS 62840-1:2016	
9	IS 1391 (Part 1): 2023	Room Air Conditioners Specification Part 1 Unitary Air Conditioners Fourth Revision
10	IS 1391 (Part 2): 2023	Room Air Conditioners Specification Part 2 Split Air Conditioners Fourth Revision
11	IS 1474 : 1959	Specification for commercial refrigerators
	Reviewed In: 2022	
12	IS 1475 (Part 1): 2001	Self - Contained drinking water coolers - Specification Part 1 energy consumption and
	Reviewed In: 2022	performance Third Revision
13	IS 16590 : 2023	Liquid Chilling Package Units - Specification First Revision
14	IS 16672 (Part 2): 2017	Refrigerated display cabinets Part 2 classification requirements and test conditions

	ISO 23953-2 : 2015	
	Reviewed In : 2021 ISO	
	23953-2 : 2015	
15	IS 16753 (Part 1): 2022	High Efficiency Filters and Filter Media for removing Particles from Air Part 1 Classification
13	ISO 29463-1 : 2017	Performance Testing and Marking First revision
	ISO 28803 : 2012	refrormance resting and marking rinst revision
1.6		HOUGEHOUR REPROPERTING ARREST AND TANGED ON A REPROPERTION AND TROP
16	IS 17550 (Part 1): 2021	HOUSEHOLD REFRIGERATING APPLIANCES CHARACTERISTICS AND TEST
	ISO 16620-4 : 2016	METHODS Part 1 General Requirements
17	IS 17570 (Part 1): 2021	Air Filters for general ventilation Part 1 Technical specifications requirements and classification
	ISO 16890-1:2016	system based upon particulate matter efficiency ePM Adoption of ISO 16890-1 2016
	11520-2:2001	
18	IS 17681 : 2022	Specification for Bottled water dispensers
	ISO 13737:2004	
19	IS 17693 : 2022	Non-electric Cooling Cabinet Made of Clay
	ISO 12967-2:2020	g and a say
20	IS 18801 : 2023	Refrigerated storage cabinets and counters for professional use Performance and energy
20	ISO 22041:2019	consumption
	130 22041.2019	Consumption
21	IC 10002 2022	
21	IS 18802 : 2023	Blast chiller and freezer cabinets for professional use Classification requirements and test
	ISO 22042:2021	conditions
22	IS 2167 : 2019	Specification for bottle coolers Second Revision
23	IS 2370 : 2014	Walk - In cold rooms - Specification First Revision
	Reviewed In: 2019	•
24	IS 302 (Part 2/Sec 24):	Safety of household and similar electrical appliances Part 2 particular requirements Sec 24
	1994	refrigerators food - Freezers and ice - Makers
	IEC 60335-2-24	Terrigerators rood Treezers and ice Triakers
	Reviewed In : 2014 IEC	
25	Pub 335-2-24 ( 1992 )	
25	IS 3315 : 2019	Evaporative air coolers Desert Coolers - Specification Third Revision
26	TG 4021 2010	
26	IS 4831 : 2019	Recommendation on units and symbols for refrigeration First Revision
27	IS 60335 (Part 2/Sec 34):	Household and similar electrical appliances Safety Part 2-34 Particular requirements for motor
	2021	compressors Adoption of IEC 60335-2-34 2021
	IEC 60335-2-34: 2021	
	IEC 60050-845: 2020	
28	IS/IEC 60335-2-40): 2018	Household and similar electrical appliances safety Particular requirements for electrical heat
	IEC 60335-2-40	pumps air-conditioners and dehumidifiers Adoption of IEC 60335-2-40
	60603-1 : 1991	pumps an constitution and denominatives recopion of the 00000 2 10
29	IS/IEC 60335-2-89 : 2010	Household and similar electrical appliances - Safety Part 2 - 89 particular requirements for
29		
	IEC 60335-2-89 : 2010	commercial refrigerating appliances with an incorporated or remote refrigerant unit or compress
	Reviewed In: 2023 IEC	
	60335-2-89:2010	
30	IS 655 : 2006	Air ducts - Specification Second Revision
	Reviewed In: 2022 ISO	
	7807: 1983	
31	IS 7872 : 2020	Deep Freezers - Specification Second Revision
32	IS/ISO 8066-2 : 2001	Rubber and Plastics Hoses and Hose Assemblies for Automotive Air Conditioning Specification
	ISO 8066-2:2001	Part 2 Refrigerant 134a Adoption of ISO 8066-2 2001
	ISO/TS 22331:2018	1 and 2 1101119014111 10 14 1400 1100 0000 2 2001
33	IS 8066 (Part 3) : 2020	Rubber and Plastics Hoses and Hose assemblies for Automotive Air Conditioning Specification
33	ISO 8066-3:2020	Part 3 Refrigerant 1234yf Adoption of ISO 8066-3 2020

	ISO 22915-7 : 2016	
34	IS 8148 : 2018	Ducted and package air - Conditioners - Specification Second Revision
	Reviewed In : 2022 ISO 13253 : 2017 ISO 16358 (Part 1) : 2013	