PRODUCT DATA INFORMATION SHEET

For Users of MELCloud-Compatible Mitsubishi Electric HVAC Products

This Information Sheet is for Users of MELCloud-Compatible Mitsubishi Electric HVAC Products ("**Products**").

Your MELCloud Product is a Connected Product for the purposes of the EU Data Act.[1] It generates Product Data which you may access and manage in accordance with the EU Data Act and the implementing regulations of EU Member States.

These Product data sets are not stored in the Product itself; they are stored within the MELCloud Related Services infrastructure [2]. These Related Services communicate with the Product via suitable Internet-enabled controllers and interfaces [3] connected to the Product [4] [5], in order to receive, process and store the data from the Connected Products.

This Information Sheet is made available by the seller, rentor or lessor (as the case may be) in satisfaction of its obligation under Art. 3(2) of the EU Data Act.

1. **The type, format, and estimated volume of Product Data which the Connected Product is capable of generating:**

   a) **Type of data**: Product Data are generated by the relevant Mitsubishi Electric Product, exchanged with, and stored by the relevant MELCLoud Related Service, only if the Product is equipped with a commercial or residential cloud-enabled controller/interface properly connected and linked to the relevant Related Service User account. Data types can be summarised as follows [6] [7] [8]:

      - Control mode, status, error, alarm
      - Operation mode, feature setting, user control
      - Sensor
      - Actuator
      - Valve
      - Compressor frequency
      - Fan status input / output
      - Damper output
      - External input and output, contact output
      - Circuit-board DIP switches status

[1] Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828. Capitalised terms used but not defined in this Information Sheet have the meanings given to them in Art. 2 of the EU Data Act (here).

[2] Prior, successful installation of an appropriate residential or commercial market Mitsubishi Electric cloud-enabled controller/interface is required, for all Connected Products to be able to connect to the Related Services, MELCloud Commercial, MELCloud Home, MELCloud, that are responsible for the Connected Products' data collection and storage.

[3] Interface families for the commercial market that may also operate autonomously: Latest generation AE-C400*/EW-C50*; Previous generation AE-200*/MCC-50*

[4] Prior User Account Registration and successful controller/interface provisioning and claiming within the analogous Related Service is required, so that the data communicated by the Product and stored within the Related Services' infrastructure are linked to the specific house/building & User Account, and thus become retrievable upon User request. No Product data are available before successful completion of this requirement.

[5] The Product families that are capable of generating and providing their data to a Related Service are shown in Appendix 1. More products families may be added to this list in the future.

[6] Not all the Products generate the same datasets, as a result of their design capabilities, optionally installed additional equipment, delivered professional configuration, system hardware generations, and evolution over time. For storage and network optimisations, generated datasets may only contain the updated data points, avoiding redundant repetition of data points that have not been changed since their last inclusion.

[7] One Product normally communicates with one Related Service within the MELCLoud family of Related Services.

[8] Mitsubishi Electric continuously evolves and improves their products. This may result to enriched or modified datasets in the future, as more data become available (or obsolete), or possibly provided by newer models entering the market, newer controllers/interfaces, and/or newer firmware updated on existing products and/or interfaces.

- Energy estimated information
- Diagnostics, Service, Maintenance data
- Controller/Interface's connectivity
- Power & energy consumption and management
- Info on optional, external third party connected systems via interfaces and relevant data exchanged:
    - Measured commodities (energy, gas, water, calories, or any other metric measured by a pulse-input capable meter)
    - Measured environmental figures (temperature, humidity)
    - Any further digital, pulse, or analogue input, as configured

Appendix 2 contains further information on the data types that each product family generates.

b) Format: The data journey starts from the Product that is monitored and its cloud-enabled interface, via internet, to the analogous MELCLoud Service cloud infrastructure, that is processing, storing, and can provide the Product data sets for the User. On this route, there is a plethora of different technologies and formats used, aiming to provide, among others, data transmission security, network bandwidth optimisation, storage space minimization, as well as power saving, where applicable.

The Product data provided to the User upon their request are currently available in csv format (Comma Separated Values file). Data sizes shown below in c) correspond to uncompressed csv format.

c) Estimated volume [9]: Normal operation of the relevant Mitsubishi Electric Product should result in the generation, transmission and storage onto the relevant MELCloud Related Service infrastructure of an average amount of data within the range of:

a. MELCLoud Commercial: 0.05 – 0.30 Megabytes per day per unit, on a 2 min frequency basis, including trend and energy data on a half-hourly frequency basis.

b. MELCLoud Home and MELCloud: 0.1-1 Megabyte per day per unit on a 1 min frequency basis

2. Whether the Connected Product is capable of generating data continuously and in real-time:

Connected Products are capable of generating data periodically.

Due to the variance of the data sets, controllers/interfaces, and technology utilized at all levels, MELCloud Related Services receive and process generated Product data:

- Periodically: with a static, configurable, or dynamic frequency within the range of 1 to 120 minutes
- On Event-basis: as soon as the controller/interface is capable of transferring data after a monitored event

[9] The volume of data is a dynamic figure, due to variety of interfaces and technologies used, at both residential and commercial environments. Factors that affect the volume of stored data are the:

- interface's type, mode of operation, and method of communication (periodic with static or dynamic frequency, onEvent -as needed basis, or even a combination of both)
- specific data points each Product is capable to provide
- composition of the whole system (number of: indoor units, outdoor units, branch controllers, ventilation units, external power meters, centralized controllers)
- type, environment and usage of the Product
- specific pair/combination of a Product with an interface
- exact MELCloud Service that is receiving, processing, and storing the data the Product generates
- specific governmental regulations (incentives) that impose their own requirements on data granularity and their retention period

- on a combination of the above
- possibly delayed up to 5 days during internet connectivity problems

Even with the faster data reception, and depending on their nature, some datasets may only exist temporarily, undergo processing or transformation, and may become available for exporting the day after, or even the month after.

3. **Whether the Connected Product is capable of storing data on-device or on a remote server, including, where applicable the intended duration of retention:**

   a) **Cloud storage**: Products are not capable of storing data on-device. Product data are stored on Mitsubishi Electric's remote servers within MELCloud Related Services' infrastructure.

   b) **Retention period**: Current data retention period varies per MELCLoud Related Service and/or data type, as follows:

      i. MELCLoud Commercial data: 15 years
      ii. MELCLoud Home data: 3 months
      iii. MELCLoud data:
         1. General data: 180 days
         2. Error log data: 2 months
         3. Interface firmware history data: unlimited
         4. Special energy-saving incentives data:
            a. Data for the BEG incentive in Germany are split into
               i. Hourly data retained for 1 month and
               ii. Monthly data retained for 3 years.

4. **How the User may access, retrieve or, where relevant, erase the data, including the technical means to do so, as well as their terms of use and quality of service:**

   a) **How users can access and retrieve Product Data**:

If a User requires access to Product Data, they need to contact melcloud.techsupport@meuk.mee.com. The user's request will then be processed, and we will liaise with them for arranging data access.

The User will need to provide the model and serial number of the cloud-enabled controller/interface they own and have connected to the Product, the house or building name configured in the Related Service, and the maximum interval for the data going backwards from the date of the request. The request shall be emailed from the same email account the User has registered with, on the analogous MELCloud Related Service ("Primary User" account in MELCloud Home and MELCloud, "Building Manager" account in MELCLoud Commercial). The interface must be active (connected and communicating via internet) and currently linked to this account. This way we can identify the authenticity of the request. We will then confirm the request with the User.

The data will be sent only to the MELCloud registered User/email account, in compressed (zipped) format. In the event the data size is larger than what the User and/or our email accounts can process, alternative methods will be pursued (ie splitting to smaller files, or reducing the requested interval), in agreement with the User. The transaction will be logged with all supporting documentation & communication.

Especially for the MELANS controllers and interfaces (exclusively in autonomous operation [10]), the user can extract the stored data themselves by using functionality already built into the controller user interfaces (local display and/or web-based).

b) How users can erase Product Data:

The User can erase Product Data as follows, depending on the MELCLoud solution they use:

- MELCLoud Commercial: By email request to melcloud.techsupport@meuk.mee.com, providing the same data as already described in a). We will inform the User of the consequences of their request, and whether they wish to proceed with an irreversible data deletion. We will confirm the request, and, before deletion, we will also provide to the User all stored data, for their records. On successful data reception and archiving by the User and a second confirmation, we will finally proceed with the data deletion. The transaction will be logged with all supporting documentation & communication.

  Product data deletion is currently materialized at the controller/interface level, which means that all data for all Products collected & communicated by a single controller at the premises will be erased.

- MELCLoud Home and MELCloud: The User may send a request to melcloud.techsupport@meuk.mee.com. The process and information needed are the same, as described for MELCLoud Commercial above.

  Alternatively, the User can delete their MELCLoud Home and/or MELCloud account directly in the relevant app & web app, as this action imposes an irreversible data deletion as well. In case the User has participated in energy-saving incentives, we strongly suggest that the User requests from us, as described in d) above, access to the data in advance and before the User account deletion, so we can provide the data for their records, before permanent deletion.

Note: If the User plans to no longer occupy the premises hosting an active connected Product (e.g. pending property sale), they must request the data in advance, and then delete their Related Services User account. Any previously stored data will no longer be available (to them or any authorized third party that received data in the past) if a new occupier registers the same

[10] See applicable families in Appendix 2 for autonomous operation

controller/interface connected to a Product afterwards, in one of the analogous MELCloud Related Services.

5. Quality of data provided:

Please note that to the extent the Data Holder is required to make available Product Data to the User or a third party under the EU Data Act such data is only made available in the same quality as is available to the Data Holder (see Arts 4(1) and 5(1)). Data Holder does not provide any representation, warranty or other commitment for the data to show any specification, level of quality, quantity, or any other characteristic beyond this and disclaims any representations, warranties and other commitments beyond what is explicitly required under the EU Data Act.

6. Changes to this Product Data Information Sheet

New legal requirements, company decisions or technical developments may lead to changes to this Product Data Information Sheet and require us to adapt this Product Data Information Sheet accordingly. The current version can be found on our MELCloud website. Please note that external links to third-party websites or their contact information may change over time. If you find information that is no longer up to date, please let us know.

Appendix 1

Product families and models

Area	Family	Name
Air Conditioning	M series	RAC
		MXZ
	Mr Slim	PAC-A Control
		HPDX
	City Multi	Mini VRF
		VRF
		HVRF
		PWFY
Commercial H/P and chillers	City Multi	DT-R, e-Series
		CAHV
		QAHV
	MEHITS	MEHITS chiller via MNET adapter
Residential Heating	Ecodan	Ecodan CO2
		Ecodan
		Geodan
		Hydrodan
Ventilation/air purification	Lossnay	Lossnay residential vertical
		Lossnay commercial
		Lossnay commercial DX
Controls	MELANS	PAC-YG66DCA DIDO controller
		PAC-YG60MCA PI controller
		PAC-YG63MCA AI controller
		AE-C400A-E-EX controller
		EW-C50A-E-EX controller
		AE-200E controller
		MCC-50E controller

Appendix 2

Product data points categories available per product family

	City Multi	City Multi	M series & Mr Slim	Ecodan	Lossnay	Lossnay	Lossnay	MEHITS	MELANS	MELANS
	Mini VRF, VRF, HVRF, PWFY	DT-R, e-Series, CAHV, CRHV, QAHV	RAC, MXZ, PAC-A control, HPDX	Ecodan CO2, Ecodan, Geodan, Hydrodan	Residential VL	Commercial LGH	Commercial GUF	MEHITS chiller via MNET adapter	PCA-YG6*	AE-C400*, EW-C50*, AE-200*, MCC-50E (autonomous operation)
Control mode, state, error	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Operation mode, feature setting, user control	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗
Sensor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Actuator	✓	✓	✗	✓	✗	✗	✗	✗	✗	✗
Valve	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Compressor	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
Fan	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗
Fan input / output	✗	✗	✗	✗	✓	✓	✓	✗	✗	✗
External input and output	✓	✓	✓	✓	✗	✓	✗	✗	✓	✗
Damper output	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗
Estimated information	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗
Diagnostics, Service, Maintenance	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗
Circuit-board DIP switches	✗	✓	✗	✓	✗	✗	✗	✗	✗	✗
Controller / Interface connectivity	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
Power and Energy Management	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓

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