BMW CARDATA TELEMATICS DATA CATALOGUE.

BMW CarData provides relevant telematics data, which is transmitted by the vehicles to the BMW Group via BMW ConnectedDrive or MINI Connected services, and stored there.

This includes values such as the mileage.

This BMW CarData telematics data catalogue explains all the available vehicle data that is relevant for the use of BMW CarData, divided into the respective individual categories.

The quantity and type of telematics data may vary depending on the vehicle and drive type, the make, model and any special accessories. The BMW CarData "Capability Service" can be used to check which of the telematics data described here is available for a specific vehicle. Further information on this can be found in the BMW CarData Integration Guide.

DATA ON THE STATUS OF A VEHICLE.

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_ altitude	Vehicle altitude	This value indicates the height of the vehicle above sea-level at the time of data collection. The value range reaches from -100m to 6000m or from -328ft to 19685ft.	Regular[2,3,4,5]	x	x	x	-100 m to 6000 m or -328 ft to 19685 ft or -NA-
bmwcardata_ batteryVoltage	Battery voltage	The value indicates the current battery voltage in the vehicle's electrical system. This value is always given in voltage, e.g. 14.4 V.	Usage-dependent[1]	x	x	x	5 V to 20 V

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_cbsCount	Number of CBS reports	The value specifies the maximum number of service notifications transmitted from the vehicle to BMW via telematics. The actual number of service notifications transmitted (see separate CBS key) varies depending on how the vehicle is used and whether relevant thresholds have been reached. Note: Not all Condition Based service messages which occur in the vehicle are also transferred.	Usage-dependent[1]	x	x	x	0 to 60 Messages
bmwcardata_chargingProfile	Charging profile	The charging profile provides information about the charging mode most recently selected for your vehicle. Where appropriate, CarData element may also be used to display individual attributes in cars without an electric drive, e.g. the preconditioning settings.	Regular[2,6]	x	x	x	The XML structure is appended at the end of the table (1).

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_checkControlMessages	Check control messages	The value indicates the last relevant Check Control messages that were displayed in the vehicle and transferred to BMW. Check control monitors functions in the vehicle and notifies the user when there is a fault in the monitored system. A check control message is displayed as a combination of indicator lights or warning lights and text messages on the dashboard, and on the head-up display, if applicable. Note: Not all Check Control messages that are displayed in the vehicle are transferred to BMW.	Regular[1,2]	x	x	x	The Check Control example is appended at the end of the table (2).
bmwcardata_codeCBSHUAU	Time threshold for main and exhaust gas inspection	The threshold indicates how many months before the main and exhaust gas inspection is due the service advisor will be notified.	Usage-dependent[1]	x	x	x	0 to 10 months

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_convertibleRoofState	Status of convertible roof	Indicates the current status of the convertible roof at the time of data collection, e.g. whether it was closed (CLOSED), open (OPEN) or – in an emergency – locked (EMERGENCYLOCKED). The following additional status values are possible: CLOSEDSECURED = convertible roof closed, vehicle secured OPENSECURED = convertible roof open, vehicle secured HARDTOPMOUNTED = hard top mounted and closed (removable hard top) INTERMEDIATEPOSITION = convertible roof in intermediate position LOADINGPOSITION = roof is in a position that allows for easy loading of the boot LOADINGPOSITIONIMMEDIATE = roof is in a position that allows for easy loading of the boot	Regular[2]	x	x	x	CLOSEDSECURED, OPENSECURED
bmwcardata_coolantTemperature	Coolant temperature	The value indicates the current coolant temperature in degrees centigrade or Fahrenheit at the time of data collection.	Usage-dependent[1]	x	x		0 °C to 150 °C or 32 °F to 302 °F

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_displayUnit	Display unit of instrument panel in vehicle	This value indicates the units (kilometres or miles) in which distances are indicated on the vehicle instrument panel.	Usage-dependent[1]	x	x	x	km, miles
bmwcardata_doorDriverFront	Status of front left door	This value indicates whether the front left door was closed at the time of data collection (CLOSED) or open (OPEN).	Regular[2]	x	x	x	OPEN, CLOSED, INVALID, UNKNOWN
bmwcardata_doorDriverRear	Status of rear left door	This value indicates whether the rear left door was closed at the time of data collection (CLOSED) or open (OPEN).	Regular[2]	x	x	x	OPEN, CLOSED, INVALID, UNKNOWN
bmwcardata_doorLockState	Status of doors	This indicates whether the vehicle's doors were locked (LOCKED) or unlocked (UNLOCKED) at the time of data collection. Other possible values are: SELECTIVELOCKED = vehicle locked with the exception of the left front door (state after a remote service door unlock was first performed) SECURED = vehicle has been secured = all doors locked and alarm system activated	Regular[2]	x	x	x	SECURED, UNLOCKED, SELECTIVE-LOCKED, LOCKED, INVALID, UNKNOWN

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_doorPassengerFront	Status of front right door	This value indicates whether the front right door was closed at the time of data collection (CLOSED) or open (OPEN).	Regular²	x	x	x	OPEN, CLOSED, INVALID, UNKNOWN
bmwcardata_doorPassengerRear	Status of rear right door	This value indicates whether the rear right door was closed at the time of data collection (CLOSED) or open (OPEN).	Regular²	x	x	x	OPEN, CLOSED, INVALID, UNKNOWN
bmwcardata_dtcreadout	Fault memory	The fault memory provides information about potential errors or technical faults in the vehicle. This information is intended for workshops. Customer-relevant errors that are displayed to the driver in the vehicle can be found under the CarData Element "Check control messages". Details about this are documented in the operating manual of the vehicle.	Usage-dependent¹	x	x	x	The JSON structure is appended at the end of the table (4).
bmwcardata_dtcreadout_confirmed	Confirmed fault memory	The confirmed fault memory provides information about errors or technical faults in the vehicle. The error messages of the CarData element "Fault memory" are abbreviated with pseudo faults.	Usage-dependent¹	x	x	x	The JSON structure is appended at the end of the table (5).
bmwcardata_fuelPercent	Tank level in %	This value indicates the tank level in percent at the time of data collection.	Regular²	x	x		0 % to 100 %, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_gpsLat	Vehicle position – degree of latitude	This value indicates the degree of latitude at which the vehicle was at the time of data collection. The degree of latitude could range from 0 (at the equator) to a maximum of +90 in the northern hemisphere or respectively -90 in the southern hemisphere. The GPS position is transferred independently of whether the GPS positioning has been activated or deactivated in your vehicle via the settings menu.	Regular[2,3,4,5]	x	x	x	-90,0000 to + 90,0000
bmwcardata_gpsLng	Vehicle position – degree of longitude	This value indicates the degree of longitude at which the vehicle was at the time of data collection. The degree of longitude could range from 0 (at the Greenwich meridian / Great Britain) to a maximum of +180 east or respectively -180 west of the meridian. The GPS position is transferred independently of whether the GPS positioning has been activated or deactivated in your vehicle via the settings menu.	Regular[2,3,4,5]	x	x	x	-180,0000 to + 180,0000

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_heading	Orientation of the vehicle	This value indicates the orientation of the vehicle in degrees at the time of data collection. If the value is 180, the vehicle is pointing directly south. If the value is 0, the vehicle is pointing directly north. The values thus range from 0 to 359. The determined orientation of the vehicle may differ from its actual orientation due to inaccuracies in the GPS positioning.	Regular[2,3,4,5]	x	x	x	0° to 359°
bmwcardata_hoodState	Status of hood	This value indicates whether the vehicle's hood was closed at the time of data collection (CLOSED) or open (OPEN).	Regular[2]	x	x	x	CLOSED, OPEN, INVALID
bmwcardata_kombiCurrentRemainingRangeFuel	Tank content range	The value indicates the current fuel level at the time of data collection as the range in kilometres or miles. If, for example, the display shows 533km or 331mi, the vehicle can cover approximately 533 kilometres or 331 miles with the fuel still available.	Regular[2]	x	x		0 km to 1000 km or 0 mi to 621 mi
bmwcardata_legalInspectionDate	Date of next inspection	This value indicates when the next inspection is due. A date will be shown respectively, for example 30.09.2018 23:00 UTC or 09.30.2018 23:00 UTC.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC or mm/dd/yyyy hh:mm UTC

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_memoryStatusFreePoiDataSets	Number of free POI spaces in navigation system	This value indicates how many POIs (points of interest) are still open in the navigation system.	Usage-dependent[3]	x	x	x	25
bmwcardata_memoryStatusMaxPoiDataSets	Maximum number of POIs stored in the navigation system	This value indicates how many POIs (points of interest) can be stored in the navigation system.	Usage-dependent[3]	x	x	x	25
bmwcardata_mileage	Mileage	The value indicates the current mileage at the time of data collection.	Regular[1,2,4,5]	x	x	x	0 km to 500000 km or 0 mi to 310686 mi
bmwcardata_naviInformationArrivalTime	Time to the navigation destination	This value indicates the arrival time at the navigation destination and is given in hours and minutes.	Usage-dependent[3,5]	x	x	x	hh:mm
bmwcardata_naviInformationDestination	Navigation destination	This value indicates the coordinates of the active navigation destination at the time of data collection in milliarcseconds.	Usage-dependent[3,5]	x	x	x	Lat : X , Lon : X
bmwcardata_naviInformationDistanceToDestination	Distance to navigation destination	This value indicates the distance to the active navigation destination in kilometres or miles at the time of data collection. The values range from 0 km to 100000 km or from 0mi to 62137mi.	Usage-dependent[3,5]	x	x	x	0 km to 100000 km or 0 mi to 62137 mi

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_naviInformationRemainingRange	Remaining range	This value indicates the remaining range of fuel in kilometres or miles at the time of data collection.	Usage-dependent[3,5]	x	x		0 km to 100000 km or 0 mi to 62137 mi
bmwcardata_nextServiceDistance	Distance to the next service	This value indicates how many kilometres or miles remain before the next service at the time of recording the data. Note: This value is calculated based on the individual CBS scopes and is not determined with every data transfer. For more details, see "Condition Based Service".	Usage-dependent[1]	x	x		0 km to 100,000 km or 0 mi to 62,137 mi
bmwcardata_remainingFuel	Tank content	The value indicates the current fuel tank level in litres or gallons at the time of data collection. Depending on the position of the tank float, the specified value may differ by up to 6 litres or 1.6 gallons.	Regular[1,2]	x	x		0 L to 100 L or 0 gal to 26.5 gal
bmwcardata_statusTeleservice	Availability of teleservices	This value indicates whether teleservices are available for this vehicle.	Usage-dependent[1]	x	x	x	PENDING, IDLE, SUCCESSFUL, ERROR

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_sunroofPosition	Position of sunroof	The value indicates the current position of the sunroof (if the vehicle has one) in centimetres or inches at the time of data collection. The values range from 0cm (closed) to 200 cm (open) or from 0in (closed) to 79 in (open).	Regular²	x	x	x	0 cm to 200 cm or 0 in to 79 in
bmwcardata_sunroofState	Status of sunroof	This value indicates whether the sunroof (if the vehicle has one) was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID
bmwcardata_sunroofTiltState	Tilting status of sunroof	This value indicates whether the sunroof (if the vehicle has one) was tilted (OPEN), half-tilted (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID
bmwcardata_timeSetting	Time zone setting in the vehicle	This value indicates the current setting for the time display in the vehicle at the time of data collection. For example, this may be winter time, summer time, UTC or manual.	Regular²	x	x	x	wintertime, summertime, utc, manual, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_trunkState	Status of boot lid	This value indicates whether the boot lid was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, OPEN, INVALID
bmwcardata_tyrePressureFrontLeft	Measured tyre pressure, front left	This value indicates the measured tyre pressure on the front left in kPa	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureFrontRight	Measured tyre pressure, front right	This value indicates the measured tyre pressure on the front right in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureRearLeft	Measured tyre pressure, rear left	This value indicates the measured tyre pressure on the rear left in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureRearRight	Measured tyre pressure, rear right	This value indicates the measured tyre pressure on the rear right in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureTargetFrontLeft	Target tyre pressure, front left	This value indicates the target tyre pressure on the front left in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureTargetFrontRight	Target tyre pressure, front right	This value indicates the target tyre pressure on the front right in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-
bmwcardata_tyrePressureTargetRearLeft	Target tyre pressure, rear left	This value indicates the target tyre pressure on the rear left in kPa.	Regular²	x	x	x	0-1000 kPa or -NA-

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_tyrePressureTargetRearRight	Target tyre pressure, rear right	This value indicates the target tyre pressure on the rear right in kPa.	Regular[2]	x	x	x	0-1000 kPa or -NA-
bmwcardata_vehicleStatusDoors	Door status	This value indicates the status of the doors, but is only sporadically recorded and transmitted. Note: It is recommended to use only the individual door status instead of this value.	Usage-dependent[4,5]	x	x	x	oldDoorStatus: ASN_secured ASN_unlocked ASN_unknown ASN_selective-Locked newDoorStatus: ASN_locked ASN_unlocked ASN_selective-Locked ASN_unknown allDoorsLocked: ASN_isUnknown ASN_isTrue ASN_isFalse trunkLocked: ASN_isUnknown ASN_isTrue ASN_isFalse
bmwcardata_vehicleStatusEngineOnStatus	Status of engine (on/off)	This value indicates whether the engine was on or off at the time of data collection or whether the status is unknown.	Usage-dependent[4,5]	x	x	x	ASN_isFalse, ASN_isTrue, ASN_isUnknown

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_vehicleStatusIgnitionStatus	State of ignition	This value indicates whether the ignition was on or off at the time of data collection or whether the status is unknown.	Usage-dependent[4,5]	x	x	x	ASN_isFalse, ASN_isTrue, ASN_isUnknown
bmwcardata_vehicleStatusLightstatus	Status of lights	This value indicates whether the vehicle light was on or off at the time of data collection or whether the status is unknown.	Usage-dependent[4,5]	x	x	x	ASN_isFalse, ASN_isTrue, ASN_isUnknown
bmwcardata_vehicleStatusLowVoltageBattery	Low-voltage battery	This value indicates the current charging status of the low-voltage battery in percent at the time of data collection and whether this value is plausible.	Usage-dependent[4,5]	x	x	x	chargingCondition: 0 % to 100 % plausibility: ASN_plausible, ASN_notPlausible
bmwcardata_vehicleStatusMobilephoneconnected	Mobile phone connection	This value indicates whether a mobile phone was linked to the vehicle at the time of data collection or whether the connection status is unknown.	Usage-dependent[4,5]	x	x	x	ASN_isFalse, ASN_isTrue, ASN_isUnknown
bmwcardata_vehicleStatusMovingFlag	Motion status of the vehicle	This value indicates whether the vehicle was in motion at the time of data collection.	Usage-dependent[4,5]	x	x	x	ASN_isFalse, ASN_isTrue, ASN_isUnknown
bmwcardata_vehicleStatusVehicleDateTime	Date and time in vehicle	These values indicate the time shown in the vehicle at the time of recording the data.	Usage-dependent[4,5]	x	x	x	00:00 to 23:59 or 12:00 am to 11:59 pm

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_vokoActivity	Pre-conditioning status of the stationary air conditioning	Current status of the pre-conditioning of the stationary air conditioning before commencing travel at the time of data collection. The value "Inactive" may be transmitted if the pre-conditioning has not been booked or if the pre-conditioning is not active at the time of data collection.	Regular²	x	x	x	standby, heating, cooling, ventilation, inactive
bmwcardata_vokoError	Reason for not carrying out pre-conditioning of the stationary air conditioning	Reason for not carrying out pre-conditioning of the stationary air conditioning at the time of data collection.	Regular²	x	x	x	LowFuel, LowBattery, QuotaExceeded, HeaterFailure, ComponentFailure, OpenOrUnlocked, OK, INVALID
bmwcardata_vokoRemainingTime	Remaining duration of pre-conditioning	This value indicates the remaining duration for the pre-conditioning of the stationary air conditioning in minutes at the time of data collection. This value may also be transmitted if the pre-conditioning has not been booked or if the pre-conditioning status of the stationary air conditioning is not active ("inactive") at the time of data collection.	Regular²	x	x	x	0-60 min, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_vokoRemoteEngineRunning	Use of engine for pre-conditioning	This value indicates whether the engine was active during pre-conditioning of the stationary air conditioning at the time of data collection. The value "Inactive" may be transmitted if the pre-conditioning has not been booked or if the pre-conditioning is not active at the time of data collection.	Regular²	x	x	x	true, false
bmwcardata_vokoRemoteEngineStartAllowed	Permission to use the engine for pre-conditioning	This value indicated whether permission was granted to use the engine for the pre-conditioning of the stationary air conditioning at the time of data collection. This is determined by the customer.	Regular²	x			true, false, INVALID
bmwcardata_windowDriverFront	Status of front left window	This value indicates whether the front left window was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID
bmwcardata_windowDriverRear	Status of rear left window	This value indicates whether the rear left window was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_windowPassengerFront	Status of front right window	This value indicates whether the front right window was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID
bmwcardata_windowPassengerRear	Status of rear right window	This value indicates whether the rear right window was open (OPEN), half-open (INTERMEDIATE) or closed (CLOSED) at the time of data collection.	Regular²	x	x	x	CLOSED, INTERMEDIATE, OPEN, INVALID
bmwcardata_windowRear	Rear window unlocking	This value indicates whether the rear window is unlocked (TRUE) or closed (FALSE).	Regular²	x	x	x	CLOSED, OPEN, INVALID
bmwcardata_yellowServiceDistance	Distance threshold for service information	The static value indicated is stored in the vehicle and indicates the first time that the customer receives a mileage-related message to inform him that the vehicle will soon be due for a service. It is given in kilometres or miles (for example 2000 km or 1243 mi).	Usage-dependent¹	x	x	x	2000 km or 1243 mi

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_yellowServiceTime	Time threshold for service information	The static value indicated is stored in the vehicle and indicates the first time that the customer receives a message to inform them that the vehicle will soon be due for a service. This is given in weeks (for example 4).	Usage-dependent[1]	x	x	x	4 weeks

USAGE-BASED VEHICLE DATA.

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_averageDistance	Average distance per week	This indicates the average volume of the distance travelled in kilometres or miles per week.	Usage-dependent[1]	x	x	x	1 km to 3000 km or 1 mi to 1864 mi
bmwcardata_averageDistanceLongterm	Average distance per week (long-life)	This value indicates the weekly average travelled in kilometres or miles over a period of 2 months.	Usage-dependent[1]	x	x	x	1 km to 3000 km or 1 mi to 1864 mi
bmwcardata_conditionBasedServices	Condition Based Service	Sensors and special algorithms take into account the operating conditions of the vehicle. CBS uses this to determine the required service. The system hereby adapts the scope of the service to the individual usage profile.	Regular[1,2]	x	x	x	The Condition Based Service example is appended at the end of the table (3).
bmwcardata_learningnavigation	Learning navigation	Displays the learned navigation recommendations (preferred routes and destinations of the customer).	Usage-dependent[2]	x	x	x	Details can be found in the Swagger documentation: https://bmw-cardata.bmwgroup.com/thirdparty/public/car-data/technical-configuration/api-specification

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DATA ON DEFINED EVENTS.

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_telematic_event_accident_call_automatic	BMW Accident Assistance Call - after accident detection	This value indicates at what time the BMW Accident Assistance call was initiated by the vehicle. The vehicle automatically detects smaller accidents (without deployment of the airbag) and initiates the BMW Accident Assistance call after manual confirmation by the driver.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC
bmwcardata_telematic_event_accident_call_manual	BMW Accident Assistance Call - triggered manually	This value indicates at what time the BMW Accident Assistance call was manually initiated by the driver.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC
bmwcardata_telematic_event_automatic_service_call	Automatic Teleservice Call	This value indicates at what time an Automatic Service Call (ASC) was initiated by the vehicle.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC or mm/dd/yyyy hh:mm UTC
bmwcardata_telematic_event_battery_guard_call	Teleservice Battery Guard	This value indicates at what time a battery guard call was initiated by the vehicle.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC or mm/dd/yyyy hh:mm UTC

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_telematic_event_charging_notification	Charging process notification	This value indicates at what time a charging process was started or ended. Note: The current status of the charging process is indicated by the "Charging status" key.	Usage-dependent[2]		x	x	dd.mm.yyyy hh:mm UTC CHARGING_SESSION_STARTED CHARGING_STARTED CHARGING_STOPPED CHARGING_SESSION_ENDED
bmwcardata_telematic_event_intelligent_emergency_call_automatic	Intelligent emergency call - triggered automatically	This value indicates at what time the vehicle automatically initiated an intelligent emergency call due to a detected accident. The intelligent emergency call is forwarded to a BMW call centre, where a rescue action is initiated according to the transferred vehicle data. In exceptional cases, it may not be possible to transfer the intelligent emergency call and the statutory emergency call (eCall) is triggered instead. The vehicle contacts the corresponding control centre directly. In this case, notification is not possible.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_telematic_event_intelligent_emergency_call_manual	Intelligent emergency call - triggered manually	This value indicates at what time an intelligent emergency call was manually initiated by the driver. The intelligent emergency call is forwarded to a BMW call centre, where a rescue action is initiated according to the transferred vehicle data. In exceptional cases, it may not be possible to transfer the intelligent emergency call and the statutory emergency call (eCall) is triggered instead. The vehicle contacts the corresponding control centre directly. In this case, notification is not possible.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC
bmwcardata_telematic_event_position_update	Position Update	This value indicates at what time the vehicle has sent new position data. To be able to use this event, first select the two keys "Vehicle position - degree of latitude" and "Vehicle position - degree of longitude".	Usage-dependent1,2	x	x	x	dd.mm.yyyy hh:mm UTC or mm/dd/yyyy hh:mm UTC
bmwcardata_telematic_event_roadside_assistance_call	BMW Roadside Assistance	This value indicates at what time the BMW Roadside Assistance call was manually initiated by the driver.	Usage-dependent[1]	x	x	x	dd.mm.yyyy hh:mm UTC

BASIC DATA OF A VEHICLE.

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_basicVehicleData	Basic vehicle data	This value indicates a list of basic vehicle data, e.g. vehicle brand and full model name.	Sporadic	x	x	x	Details can be found in the Swagger documentation: https://bmw-cardata.bmwgroup.com/thirdparty/public/car-data/technical-configuration/api-specification
bmwcardata_batterySizeMax	High-voltage battery size	This value indicates the size of the installed high-voltage battery.	Regular²		x	x	0 - 300 kWh, INVALID
bmwcardata_fullSAList	List of optional equipment	This value indicates a list with information about the optional equipment of the vehicle.	Sporadic	x	x	x	4-digit number and/or letter code comma-separated from each other.
bmwcardata_SimCardStatus	Activation status of the installed SIM card	This value indicates whether the SIM card installed in the vehicle is activated.	Sporadic¹	x	x	x	true, false
bmwcardata_socHvEnergy	Maximum energy content of the high-voltage battery	This value indicates the maximum available energy content of the high-voltage battery.	Regular²		x	x	0 - 300 kWh, INVALID
bmwcardata_vehicleImage	Vehicle image	This value provides an image of the vehicle as a PNG file.	Sporadic	x	x	x	PNG file

ELECTRIC VEHICLE DATA.

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_averageAuxpower	Auxiliary user power (power consumption of electrical components)	This value indicates the power of the auxiliary users in kW at the time of data collection. This is the on-board power consumption including the power for the air conditioning.	Regular²		x	x	0 kW to 655,34 kW, INVALID
bmwcardata_chargeAcousticLimit	Acoustic limitation of charging process	This value indicates whether charging is limited due to noise emissions.	Regular²		x	x	NO_ACTION, AUTOMATIC, UNLIMITED,LIMITED
bmwcardata_chargeControlFlapLocked	Status of charging flap	This value indicates whether the charging flap is locked at the time of data collection.	Regular²		x	x	FLAP_UNLOCKED, FLAP_LOCKED, INVALID
bmwcardata_chargeControlFlapLockedPermanently	Locking status of the charging flap	This value indicates whether the charging flap is locked independently of the central locking at the time of data collection.	Regular²		x	x	NO_ACTION, FLAP_UNLOCKED, FLAP_LOCKED, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_chargeDcPlugConnected	Status of charging plug (DC only)	This value indicates whether the vehicle was connected to a DC charging plug at the time of data collection (CONNECTED) or not (DISCONNECTED).	Regular²		x	x	DISCONNECTED, CONNECTED, INVALID
bmwcardata_chargePlugLocked	Locking status of charging plug	This value indicates the locking status of the charging plug.	Regular²		x	x	CHARGING_PLUG_UNLOCKED, CHARGING_PLUG_LOCKED, INVALID
bmwcardata_chargeSmartChargingStatus	"Smart Charging" option	This value indicates which "Smart Charging" option is being used to charge with.	Regular²		x	x	PRICE_OPTIMIZED, RENEWABLE_ENERGEY, CO2_OPTIMIZED, INVALID
bmwcardata_chargingAcAmpere	AC charging current	This value indicates the maximum charging current for the most recent charging process in ampere (A) (only when charging with alternating current). Values between 0 and 25 are possible. Both the vehicle and charging station could be individually charged with a certain maximum charging current. The value displayed here is the greater of these two figures.	Regular²		x	x	0 A to 25 A or -NA-

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_chargingAcRestriction	AC charging current limit and selection	The first value indicates whether the charging current used to charge the vehicle is limited. The second value describes the type of limit (reduced or minimum).	Regular²		x	x	NOTCHOSEN, CHOSEN, INVALID; MAXCHARGING, REDUCEDCHARGING, MINCHARGING, INVALID
bmwcardata_chargingAcVoltage	AC charging voltage	This value indicates the charging voltage for the most recent charging process (only when charging with alternating current). This value is usually in the region of 230 V. However, charging voltages may range from 0 to 300.	Regular²		x	x	0 V to 300 V or -NA-
bmwcardata_chargingConnectionType	Charging process of the high-voltage battery (inductive/conductive)	This value indicates the charging process (CONDUCTIVE/INDUCTIVE) used to charge the vehicle at the time of data collection.	Regular²		x	x	CONDUCTIVE, INDUCTIVE, SIGNAL_INVALID
bmwcardata_chargingCurrentAcLimit	Charging current limit	This value indicates the set limit of the charging current in amperes (A).	Regular²		x	x	0-252 A, INVALID
bmwcardata_chargingCurrentAcLimitActive	Status of charging limit	This value indicates whether a charging current limit was active at the time of data collection.	Regular²		x	x	AC_LIMIT_INACTIVE, AC_LIMIT_ACTIVE, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_charginghistory	Charging History	This value shows a list of charging processes performed on the vehicle, which were recorded in the course of the "Charging History" service.	Usage-dependent[1]		x	x	Details can be found in the Swagger documentation: https://bmw-cardata.bmwgroup.com/thirdparty/public/car-data/technical-configuration/api-specification
bmwcardata_ChargingLevelPredicted	Current predicted charging status	This value indicates the current predicted charging status in percent.	Regular[2]		x	x	0 % to 100 %
bmwcardata_chargingMethod	Charging method and plug type	This value describes whether the vehicle was charged with direct current (DC) or alternating current (AC) and which charging plug was used for this purpose. The indicated technical value AC_TYPE1PLUG, for example, indicates that the high-voltage battery was charged in alternating current mode, making use of a charging plug of Type 1.	Regular[2]		x	x	AC_TYPE1PLUG,AC_TYPE2PLUG, NOCHARGING
bmwcardata_chargingPhaseNumber	Charging process of the high-voltage battery (phases)	This value indicates the number of phases in which the high-voltage battery will be charged.	Regular[2]		x	x	NO_CHARGING, 1-PHASES, 2-PHASES, 3-PHASES, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_chargingStatus	Charging status	This value indicates the current charging status of the vehicle at the time of data collection. For example, NOCHARGING means that the vehicle's high-voltage battery is currently not being charged. INITIALIZATION means that the charging process is just being prepared, while CHARGINGACTIVE means that the battery is just being charged. Other possible values are: CHARGINGPAUSED (charging paused), CHARGINGENDED (charging ended) and CHARGINGERROR (charging error).	Regular²		x	x	NOCHARGING, INITIALIZATION, CHARGINGACTIVE, CHARGINGPAUSED, CHARGINGENDED, CHARGINGERROR
bmwcardata_ChargingTimeRemainingPredicted	Estimate of remaining charging time	This value indicates the estimated remaining charging time in minutes.	Regular²		x	x	0 - 200 Min
bmwcardata_ChargingWindowSelection	Charging window selection	Indicates a pre-defined time window in which the high-voltage battery of the vehicle should be charged. The value could be either NOTCHOSEN or CHOSEN.	Regular²		x	x	CHOSEN, NOTCHOSEN, -NA-

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_DisplayControlChargingDuration	Charging time display	This value indicates whether the charging time is displayed in the vehicle.	Regular²		x	x	NO_DISPLAY_TIME_FOR_CHARGING, DISPLAY_CHARGING_DURATION, NO_DISPLAY_CHARGING_DURATION, INVALID
bmwcardata_DisplayControlDepartureTime	Departure time display	This value indicates whether the departure time is displayed in the vehicle.	Regular²		x	x	NO_DISPLAY_DEPARTURE_TIME, DISPLAY_DEPARTURE_TIME_REACHABLE, DISPLAY_DEPARTURE_TIME__NOT_REACHABLE, INVALID
bmwcardata_displayMaximumChargingCurrentlimitMode2	Maximum charging current	This value indicates the maximum available charging current, independently of the infrastructure and selected cable.	Regular²		x	x	0-250 A, INVALID
bmwcardata_displayMinimumChargingCurrentLimitMode2	Minimum charging current	This value indicates the minimum available charging current, independently of the infrastructure and selected cable.	Regular²		x	x	0-250 A, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_displayRangePredictionChargingTarget	Remaining electric range, depending on target charging status	This value indicates the remaining electric range at the time of data collection. This depends on the set target value of the charging status.	Regular²		x	x	0-4000 KM oder MI, INVALID
bmwcardata_HVPMChargingEndReason	Reason for ending a charging process	This value indicates the reason why a charging process was ended.	Regular²		x	x	UNKNOWN, CHARGING_GOAL_REACHED, END_REQUESTED_BY_DRIVER, CONNECTOR_REMOVED, POWERGRID_FAILED, HV_SYSTEM_FAILURE, CHARGING_STATION_FAILURE, PARKING_LOCK_FAILED, NO_PARKING_LOCK, SIGNAL_INVALID, INVALID
bmwcardata_isPlugConnected	Status of charging plug	This value indicates whether the vehicle was connected to a charging plug at the time of data collection (CONNECTED) or not (DISCONNECTED).	Regular²		x	x	CONNECTED, DISCONNECTED, INVALID, -NA-

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_kombiCurrentRemainingRangeElectric	Remaining electric range in km or mi	This value indicates the remaining electric range at the time of data collection.	Regular²		x	x	0 km to 4000 km or 0 mi to 2485 mi, INVALID
bmwcardata_kombiElectricRangeConsumptionAvg	Average electric consumption	This value indicates the average electric consumption in [kWh/100 km or mi/kWh] at the time of data collection. Note: Not available for the models i3 and i8.	Regular²		x	x	0 kWh/100 km to 100 kWh/100 km or 0,6213 mi/kWh to 62,1371 mi/kWh
bmwcardata_kombiTimeToDepartureOrFullyCharged	Calculated remaining charging time of the high-voltage battery	This value indicates the calculated time (in minutes) until the high-voltage battery is fully charged. If a navigation destination has been set, the time remaining until reaching the destination will be displayed.	Regular²		x	x	0 – 65500 Min, INVALID
bmwcardata_RCPChargingMode	Charging profile (remote)	This value provides information about the charging profile of the vehicle that was configured via the app (remote).	Usage-dependent⁴		x	x	INVALID, DIRECT_CHG_ONCE_NOT_ACTIVE
bmwcardata_RemainingRangePredicted	Estimate of electric range during charging	This value indicates the electric range predicted during charging.	Regular²		x	x	0 - 1000 km
bmwcardata_RemainingTotalRangePredicted	Estimate of total range during charging	This value indicates the total range predicted during charging (total of electric range and combustion engine range).	Regular²		x		0 - 2000 km

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_SegmentLastTripAccelerationStars	Driving style evaluation - 'acceleration behaviour'	This value indicates the number of stars which the driving style analysis has given to the acceleration behaviour of the driver at the time of data collection. The system allocates 0 to 5 stars.	Regular²		x	x	0 to 5 stars
bmwcardata_SegmentLastTripBrakingStars	Driving style evaluation - 'pro-active driving'	This value indicates the number of stars which the driving style analysis has given to the 'pro-active driving' behaviour of the driver at the time of data collection. The system allocates 0 to 5 stars.	Regular²		x	x	0 to 5 stars
bmwcardata_SegmentLastTripECOPlusTimeOfActivation	Activation period for ECO PLUS mode during most recent drive	Indicates the length of time for which ECO PLUS mode was activated during the most recent drive when data were recorded. The values range from 0 to 100.	Regular²		x	x	0 % to 100 %
bmwcardata_SegmentLastTripECOTimeOfActivation	Activation period for ECO mode during most recent drive	Indicates the length of time for which ECO mode was activated during the most recent drive when data were recorded. The values range from 0 to 100.	Regular²		x	x	0 % to 100 %
bmwcardata_SegmentLastTripElectricEnergyConsumptionComfort	Electrical energy consumption in COMFORT mode during the most recent drive	This indicates the electrical energy consumption (kWh) in COMFORT mode, measured at the time of data collection.	Regular²		x	x	0 kWh to 10 kWh

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_ SegmentLast TripMilageSeg mentEnd	Mileage after last drive	This value indicates the total mileage after the last drive logged.	Regular²		x	x	0 km to 999999 km or 0 mi to 621371 mi
bmwcardata_ SegmentLast TripRatioElectr icDrivenDistan ce	Electrically driven distance during the most recent drive	This value indicates the distance covered with electrical energy during the most recent drive in percentage.	Regular²		x	x	0 % to 100 %
bmwcardata_ SegmentLast TripRecuperati onOverall	Energy recuperated during the last drive	This value indicates the average electrical energy in kilowatt hours (kWh/100 km or kWh/62 mi) recuperated during the last logged drive per 100 kilometres or 62 miles. The values range from 0 to 254.	Regular²		x	x	0 kWh/100 km to 170 kWh/100 km or 0 kWh/62 mi to 170 kWh/62 mi
bmwcardata_ SegmentLast TripSOCSegm entEnd	Charging status of battery	This value indicates the charging status of the high-voltage battery at the end of the most recently logged drive (in percentage).	Regular²		x	x	0 % to 100 %
bmwcardata_ SegmentLast TripTimeSegm entEnd	Time of most recent drive	The time stamp contains the date and local time of the most recently logged and transmitted drive, for example 15.05.2017 15:51:00 UTC or 05/15/2017 15:51:00 UTC.	Regular²		x	x	dd.mm.yyyy hh:mm:ss UTC or mm/dd/yyyy hh:mm:ss UTC

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_singleImmediateCharging	Instant charging function status	This value indicates whether the "instant charging" function is activated.	Regular²		x	x	DIRECT_CHG_ONCE_NOT_ACTIVE, DIRECT_CHG_ONCE_ACTIVE, INVALID
bmwcardata_smeEnergyDeltaFullyCharge	Energy required until high-voltage battery fully charged	This value indicates the amount of energy required to fully charge the battery.	Regular²		x	x	0 - 300 kWh, INVALID
bmwcardata_socCustomerTarget	Target charging status of the high-voltage battery	This value indicates the target charging status of the high-voltage battery in percent. This is displayed in 10% increments.	Regular²		x	x	0-100 [10% Schritte], INVALID
bmwcardata_socHvEnergyMax	Energy content of the high-voltage battery	This value indicates the current energy content of the high-voltage battery.	Regular²		x	x	0 - 300 kWh, INVALID
bmwcardata_socHvHeader	Charging status of high-voltage battery	This value indicates the current charging status of the vehicle at the time of data collection.	Regular²		x	x	0 % to 100 %
bmwcardata_speed_avg	Average speed	The value indicates the average speed driven by the vehicle in km/h or mph at the time of data collection.	Regular²		x	x	0 km/h to 300 km/h or 0 mph to 186 mph, INVALID

Technical descriptor	CarData Element	Description	Data transfer	ICE*	PHEV*	BEV*	Typical value range
bmwcardata_statusHospitality	Locking status of charging plug after charging complete	This value indicates whether the charging plug is automatically unlocked (HOSPITALITY_ACTIVE) or remains locked (HOSPITALITY_INACTIVE) after charging is completed.	Regular²		x	x	HOSPITALITY_INACTIVE, HOSPITALITY_ACTIVE, INVALID

DATA TRANSFER:

The data mentioned above can be transferred from the vehicle to BMW Group by the BMW ConnectedDrive or MINI Connected services listed in the following:

[1] Teleservices, Roadside Assistance, Remote Software Upgrade

[2] Vehicle networked with portals and apps

[3] Concierge Call

[4] Remote Services

[5] Intelligent emergency call

[6] BMW online

DATA AVAILABILITY:

For data protection purposes, telematics data that is older than 6 months and is exclusively transferred via the "Vehicle Networked with Portals and Apps" service will be deleted.

(1) bmwcardata_chargingProfile example:

```
<wt> <departureTimes> <departureTime1Active> <deactivate/> </departureTime1Active> <departureTime1> <hours>15</hours> <minutes>30</minutes>
</departureTime1> <departureTime2Active> <deactivate/> </departureTime2Active> <departureTime2> <hours>8</hours> <minutes>0</minutes>
</departureTime2> <departureTime3Active> <deactivate/> </departureTime3Active> <departureTime3> <hours>8</hours> <minutes>0</minutes>
</departureTime3> <departureTime4Active> <deactivate/> </departureTime4Active> </departureTimes> <climatisationOn> <isTrue/> </climatisationOn>
```

```
<reductionOfChargeCurrent> <start> <hours>0</hours> <minutes>0</minutes> </start> <end> <hours>0</hours> <minutes>0</minutes> </end>
</reductionOfChargeCurrent> <immediateCharging> <isTrue/> </immediateCharging>< /wt>
```

(2) bmwcardata_checkControl-Messages example:

```
{"name":"bmwcardata_checkControlMessages","timestamp":"Thu Aug 31 14:21:53 CEST 2017","unit":"-
","value":"[{\"id\":143,\"messageType\":\"CCM\",\"status\":\"ZERO\",\"text\":\"Tyre pressure loss. Caution stop\",\"unitOfLengthRemaining\":\"105592\"}]"},
```

Note: The attribute "unitOfLengthRemaining" is assigned to the object "totalDistance". This specifies the current mileage at the time of generating Check control messages.

(3) bmwcardata_conditionBased-Services example:

```
\date\:\01.09.2021 00:00\\description\:\Next change at specified date at the latest.\\id\:3\messageType\:\CBS\\status\:\OK\\text\:\Brake
fluid\\date\:\01.09.2021 00:00\\description\:\Next visual inspection after specified distance travelled or on given
date.\\id\:17\messageType\:\CBS\\status\:\OK\\text\:\Vehicle check\\date\:\01.09.2021 00:00\\description\:\Next mandatory vehicle inspection on specified
date.\\id\:32\messageType\:\CBS\\status\:\OK\\text\:\§ Vehicle inspection\
```

Note: The attribute "unitOfLengthRemaining" is assigned to the object "remainingDistance". The specifies the remaining driving distance until the next required service.

Possible status values:
OK means "Service not due".
PENDING means "Service imminently due".
OVERDUE means "Service overdue".

VALUE RANGE: UNKNOWN, INVALID, NA:
UNKNOWN, INVALID, -NA- state that the value could not be determined in the vehicle or the transmission was faulty.

(4) bmwcardata_dtcreadout example:

```
{
 telematicKeyValues": [
        {
        "name": "bmwcardata_dtcreadout",
        "timestamp": "Wed Nov 27 11:59:45 UTC 2019",
        "unit": "-",
        "value": "{\"dtcReadout\":{\"asyncStatus\":\"Complete\",\"messageTimestamp\":\"Wed Nov 27 11:59:45 UTC 2019\",\"vehicleId\":\"4331a132-327b-
        4b88-
        8b1d12af1dbba94e\",\"dtcs\":[{\"dtcId\":\"801228\",\"status\":\"ACTIVE\",\"ecuId\":\"120\"},{\"dtcId\":\"22FE2B\",\"status\":\"ACTIVE\",\"ecuId\":\"18\"
        },{\"dtcId\":\"22FE42\",\"status\":\"ACTIVE\",\"ecuId\":\"18\"},{\"dtcId\":\"D42C67\",\"status\":\"ACTIVE\",\"ecuId\":\"44\"},{\"dtcId\":\"8032F5\",\"status\
        ":\"ACTIVE\",\"ecuId\":\"44\"},{\"dtcId\":\"8032FD\",\"status\":\"ACTIVE\",\"ecuId\":\"44\"},{\"dtcId\":\"481E13\",\"status\":\"ACTIVE\",\"ecuId\":\"44\"}]}}
        "
        }
]
}
```

The listed codes DTCID and ECUID inform the user which specific error message has occurred and which specific control device it concerns. Further information on interpreting the error codes can be found on the Aftersales Online Portal of the BMW Group.

(5) bmwcardata_dtcreadout_confirmed example:

No confirmed DTC available:

```
{
    "asyncStatus": "Complete",
    "dtcData": [],
    "messageTimestamp": "Tue Jul 23 13:57:25 UTC 2019",
    "vehicleId": "clearance-ID"
}
```

Confirmed DTC available:

```
{
    "asyncStatus":"Complete","dtcData":[{"dtcId":"CD0487","ecuAddress":"16","ecuVariantName":"ZGW_01","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"8011FA","ecuAddress":"120","ecuVariantName":"IHKA20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"801225","ecuAddress":"120","ecuVariantName":"IHKA20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"E71439","ecuAddress":"120","ecuVariantName":"IHKA20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"D51A3E","ecuAddress":"48","ecuVariantName":"EPS_20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"D51C12","ecuAddress":"48","ecuVariantName":"EPS_20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"D51C20","ecuAddress":"48","ecuVariantName":"EPS_20","status":"PREVIOUSLY_ACTIVE"},{"dtcId":"B7F8C3","ecuAddress":"99","ecuVariantName":"CHAMP2","status":"PREVIOUSLY_ACTIVE"}],"messageTimestamp":"Mon Jul 13 05:02:52 UTC 2020","vehicleId":"clearance-ID"
}
```

* ICE, PHEV, BEV:
ICE means combustion engine
PHEV means hybrid drive
BEV means electric drive

MHEV corresponds to a Mild Hybrid Electric Vehicle (48V battery, not 48V charging) and corresponds to an ICE in the data offer.

**REMARK:
Due to possible delays in the mobile transmission and data processing, a waiting time of approx. 3 minutes is recommended between push notifications and opening the accompanying data sets.

***REMARK:
Following customer consent, it can take up to 24 hours for this CarData element until the vehicle is recorded and initial data is transmitted to BMW.

CODING FORMAT ASN:
The data transmitted correspond to the technical format of the vehicle. Some telematics data transmitted also include the "ASN_" coding format as well as the value. ASN is the coding and plays no part in interpreting the value.

ASN_isFalse means "false"
ASN_isTrue means "true"
ASN_isUnknown means "Value could not be determined in the vehicle"
ASN_plausible equates to "plausible" compared to a calculated model value (measured and calculated value match).
ASN_notPlausible equates to "not plausible" compared to a calculated model value (measured and calculated value do not match).