



CERTIFIKAT O ECE-HOMOLOGACIJI
ECE COMPONENT TYPE-APPROVAL CERTIFICATE

Sporočilo o podeljeni homologaciji za tip vozila glede na tip nadomestnega sistema za dušenje zvoka NORESS ali sestavnega dela v skladu s Pravilnikom št. 92 R, Amandma 02, Dodatek 00

Communication concerning approval granted of a vehicle type with regard to a type of NORESS or component thereof pursuant to Regulation No. 92 R, Amendment 02, Supplement 00

Homologacijska št.: **E26 92 R 02/00 8154**
Approval No.:

Razširitev št.: **00**
Extension No.:

- | | |
|--|--|
| 1. Blagovno ime ali znamka motocikla:
<i>Trade name or mark of the motorcycle:</i> | Znamka
KTM |
| 2. Tip motocikla:
<i>Motorcycle type:</i> | KTM IS Duke (e1*168/2013*00047*)
KTM IS Duke (e1*168/2013*00046*) |
| 3. Ime in naslov proizvajalca:
<i>Manufacturer's name and address:</i> | KTM AG
Stallhofnerstraße 3
AT-5230 Mattighofen
Austria |
| 4. Če pride v poštev, ime in naslov predstavnika proizvajalca:
<i>If applicable, name and address of manufacturer's representative:</i> | / |
| 5. Motor
<i>Engine</i> | |
| 5.1. Proizvajalec:
<i>Manufacturer:</i> | KTM AG |
| 5.2. Tip:
<i>Type:</i> | glej poročilo o preskusu 21-00011-CM-GBM-00
<i>see the test report 21-00011-CM-GBM-00</i> |
| 5.3. Model:
<i>Model:</i> | / |
| 5.4. Največja nazivna moč:
<i>Rated maximum net power:</i> | glej poročilo o preskusu
<i>see the test report</i> |
| 5.5. Vrsta motorja:
<i>Kind of engine:</i> | na prisilni vžig
<i>positive-ignition</i> |

5.6.	Način delovanja: <i>Cycles:</i>	štiritaktni <i>four-stroke</i>
5.7.	Prostornina valja: <i>Cylinder capacity:</i>	glej poročilo o preskusu <i>see the test report</i>
6.	Menjalnik <i>Transmission</i>	
6.1.	Vrsta menjalnika: <i>Type of transmission:</i>	ročni menjalnik <i>manual transmission</i>
6.2.	Število prestav: <i>Number of gears:</i>	6 prestav <i>6 gears</i>
7.	Oprema <i>Equipment</i>	
7.1.	Dušilnik zvoka <i>Exhaust silencer</i>	
7.1.1.	Proizvajalec ali pooblaščen zastopnik (če obstaja): <i>Manufacturer or authorized representative (if any):</i>	AKRAPOVIC D.D.
7.1.2.	Model: <i>Model:</i>	/
7.1.3.	Tip: <i>Type:</i>	M-HAP015
	v skladu s številko risbe: <i>in accordance with drawing No.:</i>	M-HAP015_HOM_MUFFLER
7.2.	Dušilnik zvoka na sesalni strani <i>Intake silencer</i>	originalen <i>original</i>
7.2.1.	Proizvajalec ali pooblaščen zastopnik (če obstaja): <i>Manufacturer or authorized representative (if any):</i>	AKRAPOVIC D.D.
7.2.2.	Model: <i>Model:</i>	/
7.2.3.	Tip: <i>Type:</i>	/
	v skladu s številko risbe: <i>in accordance with drawing No.:</i>	/
8.	Uporabljene prestave za izvajanje meritev v vožnji: <i>Gears used for test of motor cycle in motion:</i>	3 <i>3rd gear</i>
9.	Končno prestavno razmerje(a): <i>Final drive ratio(s):</i>	2,667 / 3,0
10.	ECE homologacijska številka pnevmatik(e): <i>ECE type approval number of tyre(s):</i>	ni navedeno <i>no specification</i>

Če ni na voljo, navesti naslednje podatke:
If not available, the following information shall be provided:

10.1. Proizvajalec pnevmatik: <i>Tyre manufacturer:</i>	1. os: Pirelli, 2. os: Pirelli <i>1st axle: Pirelli, 2nd axle: Pirelli</i>
10.2. Trgovska oznaka(e) tipa pnevmatik (po oseh), (npr: tovarniška oznaka, hitrostni razred in razred nosilnosti): <i>Commercial description(s) of the type of tyre (by axle), (e.g. trade name, speed index, load index):</i>	1. os: Diablo Supercorsa Hitrostni razred: W, Razred nosilnosti: 54 2. os: Diablo Supercorsa Hitrostni razred: W, Razred nosilnosti: 56 <i>1st axle: Diablo Supercorsa Speed index: W, Load index: 54 2nd axle: Diablo Supercorsa Speed index: W, Load index: 56</i>
10.3. Velikost pnevmatik (po oseh): <i>Tyre size (by axle):</i>	1. os: 110/70 ZR17 2. os: 150/60 ZR17 <i>1st axle: 110/70 ZR17 2nd axle: 150/60 ZR17</i>
10.4. Druge homologacijske številke (če so na voljo): <i>Other type approval number (if available):</i>	/
11. Mase <i>Masses</i>	
11.1. Največja tehnično dovoljena masa: <i>Maximum permissible gross weight:</i>	375 kg
11.2. Testna masa: <i>Test mass:</i>	239 kg
11.3. Indeks razmerja moči in mase (PMR): <i>Power to mass ratio index (PMR):</i>	135
12. Dolžina vozila: <i>Vehicle length:</i>	2,0 m
12.1. Referenčna dolžina l_{ref} : <i>Reference length l_{ref}:</i>	2,0 m
13. Hitrost vozila pri meritvah v prstavi (i) <i>Vehicle speeds of measurements in gear (i)</i>	
13.1. Hitrost vozila na začetku pospeševalnega cikla (povprečje 3 pospeševanj) za prestavo (i): <i>Vehicle speed at the beginning of the period of acceleration (average of 3 runs) for gear (i):</i>	39,7 km/h
13.2. Dolžina pred začetkom pospeševanja za prestavo (i): <i>Pre-acceleration length for gear (i):</i>	0 m
13.3. Hitrost vozila v_{pp} (povprečje 3 pospeševanj) za prestavo (i): <i>Vehicle speed v_{pp} (average of 3 runs) for gear (i):</i>	49,3 km/h

13.4. Hitrost vozila $v_{BB'}$ (povprečje 3 pospeševanj) za prestavo (i): <i>Vehicle speed $v_{BB'}$ (average of 3 runs) for gear (i):</i>	59,0 km/h
14. Hitrosti vozila pri meritvah v prestavi (i+1) (če pride v poštev) <i>Vehicle speeds of measurements in gear (i+1) (if applicable)</i>	
14.1. Hitrost vozila na začetku pospeševalnega cikla (povprečje 3 pospeševanj) za prestavo (i+1): <i>Vehicle speed at the beginning of the period of acceleration (average of 3 runs) for gear (i+1):</i>	ne pride v poštev <i>not applicable</i>
14.2. Dolžina pred začetkom pospeševanja za prestavo (i+1): <i>Pre-acceleration length for gear (i+1):</i>	ne pride v poštev <i>not applicable</i>
14.3. Hitrost vozila $v_{PP'}$ (povprečje 3 pospeševanj) za prestavo (i+1): <i>Vehicle speed $v_{PP'}$ (average of 3 runs) for gear (i+1):</i>	ne pride v poštev <i>not applicable</i>
14.4. Hitrost vozila $v_{BB'}$ (povprečje 3 pospeševanj) za prestavo (i+1): <i>Vehicle speed $v_{BB'}$ (average of 3 runs) for gear (i+1):</i>	ne pride v poštev <i>not applicable</i>
15. Pospeški so izračunani med linijami AA' in BB'/PP' in BB' <i>Accelerations are calculated between lines AA' and BB'/PP' and BB'</i>	
15.1. Opis delovanja naprav za stabilizacijo pospeševanja (če pride v poštev): <i>Description of functionality of devices used to stabilize the acceleration (if applicable):</i>	ne pride v poštev <i>not applicable</i>
16. Ravni hrupa v vožnji <i>Noise levels of moving vehicle</i>	
16.1. Rezultati merjenja pri polnem plinu L_{wot} : <i>Wide-open-throttle test result L_{wot}:</i>	77,2 dB(A)
16.2. Rezultati merjenja v vožnji L_{crs} : <i>Constant speed test results L_{crs}:</i>	71,5 dB(A)
16.3. Delni faktor moči k_p : <i>Partial power factor k_p:</i>	0,54
16.4. Končni rezultat merjenja L_{urban} : <i>Final test result L_{urban}:</i>	74,1 dB(A)

17. Raven hrupa v mirovanju
Noise level of stationary vehicle
- 17.1. Pozicija in smer mikrofona
(skladno z dodatkom 2, Priloga 3,
pravilnika ECE 41 R, amandma 04):
*Position and orientation of microphone
(according to Appendix 2 of Annex 3 of 04
series of regulation No. 41):*
- 17.2. Rezultat merjenja v mirovanju:
Test result for stationary test:
18. Dodatne določbe za emisije hrupa:
Additional sound emission provisions:
19. Referenčna skladnost podatkov v uporabi
In-use compliance reference data
- 19.1. Za meritev izbrana prestava (i) ali,
izbrana lega izbirnika prestave,
pri vozilih z varibalinim menjalnikom:
*Gear (i) or, for vehicles tested with non-locked
gear ratios, the position of the gear selector chosen
for the test:*
- 19.2. Dolžina pred začetkom pospeševanja l_{PA} :
Pre-acceleration length l_{PA} :
- 19.3. Hitrost vozila na začetku pospeševalnega cikla
(povprečje 3 pospeševanj) za prestavo (i):
*Vehicle speed at the beginning of the period
of acceleration (average of 3 runs) for gear (i):*
- 19.4. Raven zvočnega tlaka $L_{wot(i)}$:
Sound pressure level $L_{wot(i)}$:
20. Datum predložitve vozila v postopek homologacije:
Date of submission of vehicle for approval:

glej točko 3.5.3. poročila o preskusu
21-00011-CM-GBM-00

see point 3.5.3. of the test report
21-00011-CM-GBM-00

85 dB(A) / 4500 min⁻¹

glej točko 3.5.3. poročila o preskusu
21-00011-CM-GBM-00 in
priložene risbe
see point 3.5.3. of the test report
21-00011-CM-GBM-00 and
attached drawings

3

3rd gear

0 m

39,7 km/h

77,2 dB(A)

02.09.2020

21. Tehnična služba odgovorna za homologacijske preskuse:
Technical service responsible for conducting approval tests: TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
Germany
22. Datum poročila o preskusu, ki ga je izdala ta služba:
Date of test report issued by that Service: 22.02.2021
23. Številka poročila o preskusu, ki ga je izdala ta služba:
Number of test report issued by that Service: 21-00011-CM-GBM-00
24. Homologacija:
Approval: **podeljena**
granted
25. Mesto homologacijske oznake na vozilu:
Position of approval mark on the vehicle: vgravirano z laserjem / tablica
pritrjena s kovicami
engraved by laser / plate fixed with rivets
26. Kraj:
Place: 1000 LJUBLJANA
27. Datum:
Date: 08.03.2021
28. Podpis:
Signature: 
mag. Tomaž Svetinič, univ. dipl.inž.
vodja sektorja za vozila
29. Temu sporočilu je priložen seznam dokumentov, ki so deponirani pri homologacijskem organu, ki je odobril to homologacijo in jih je na zahtevo mogoče dobiti:
glej kazalo opisne dokumentacije št. E8154 Rev.00
The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request:
see index to information package No E8154 Rev.00



Ta homologacija se uporablja za tip serijsko izdelanih neoriginalnih nadomestnih sistemov za dušenje zvoka (RESS) ali njegovih sestavnih delov pod naslednjimi pogoji:


Posamezni proizvodi iz serijske proizvodnje morajo ustrezati najmanj vsem zahtevam Pravilnika št. 92 R, Amandma 02, Dodatek 00, "Enotni pogoji za homologiranje neoriginalnih nadomestnih sistemov za dušenje zvoka (RESS) za motorna kolesa, mopede in trikolesna vozila".

Priloženo poročilo o preskusu in risbe so sestavni del te homologacije.

Vsak sestavni del neoriginalnega nadomestnega sistema za dušenje zvoka, vendar ne deli in cevi za vgradnjo, mora biti čitljivo in trajno označen z:

- znamko (tovarniškim imenom ali oznako proizvajalca),
- trgovskim imenom,
- homologacijsko oznako.

Temu tipu proizvoda se dodeli naslednja homologacijska oznaka:

 92 R - 02 8154

Homologacijska oznaka na proizvodu mora po izvedbi in velikosti ustrezati zahtevam Pravilnika št. 92 R.02.

S tem homologacijskim znakom so lahko označeni samo tisti proizvodi, ki v celoti ustrezajo homologacijski dokumentaciji.

Homologacijska oznaka na proizvodu mora biti nameščena na mestu, ki je označeno v homologacijski dokumentaciji. Mesto homologacijske oznake mora biti izbrano tako, da je oznaka jasno čitljiva tudi po vgradnji v vozilo.

Proizvod je lahko označen tudi s tujo homologacijsko ali drugo oznako, če s tem ni motena razpoznavnost in čitljivost homologacijske oznake, ki jo je dodelil slovenski homologacijski organ.

Na proizvodu ne sme biti oznak, ki bi lahko privedle do zamenjave z uradno dodeljeno oznako.

Kakršnekoli spremembe na proizvodu so dovoljene samo na podlagi posebnega dovoljenja homologacijskega organa.

Veljavnost homologacije preneha z vrnitvijo ali z odvzemom. Homologacija se odvzame, če pogoji za podelitev in obstoj homologacije ne obstajajo več, če lastnik homologacije krši obveznosti, povezane s homologacijo, oziroma če se ugotovi, da homologirani proizvod ne ustreza več veljavnim predpisom.

Proizvajalec je dolžan stalno kontrolirati kakovost homologiranega proizvoda in njegovo skladnost s homologacijsko dokumentacijo. O tej kontroli je dolžan voditi evidenco in omogočiti vpogled v zapise nadzornemu organu, ki ga določi homologacijski organ. V primeru ugotovitve neskladnosti s homologacijsko dokumentacijo je proizvajalec dolžan o tem takoj obvestiti homologacijski organ.

Homologacijski organ lahko kadarkoli preverja pravilno izvajanje pooblastil, dodeljenih s to homologacijo, in v ta namen tudi izbira vzorce za ponovni preskus. Stroške takšnih pregledov in presoj skladnosti proizvodnje, se zaračunajo proizvajalcu.

Vsako spremembo oznake proizvajalca, naslova ali proizvodne tovarne oziroma pri homologaciji imenovane pooblaščen osebe je treba takoj sporočiti homologacijskemu organu.

Pravice, podeljene s to homologacijo, so neprenosljive. Pravice tretjih s to homologacijo niso prizadete.

V primerih, da se proizvodnja ali prodaja proizvoda ne začne v roku enega leta od podelitve homologacije, da se proizvodnja ali prodaja prekine za več kot eno leto oziroma, da se predvideva taka prekinitev, je o tem treba takoj obvestiti homologacijski organ.

O začetku proizvodnje ali začetku prodaje oziroma njihovem ponovnem začetku je treba obvestiti homologacijski organ najkasneje v enem mesecu.

Neupoštevanje zgoraj navedenih določil lahko povzroči odvzem homologacije in se kazensko preganja.

Pravno razlago v zvezi s to homologacijo lahko daje samo homologacijski organ.

08.03.2021



mag. Tomaž Svoboda, univ. dipl. inž.
vodja sektorja za vozila

This Approval shall apply to a type of non-original replacement exhaust silencing systems (RESS) or its components from serial production under the following conditions:

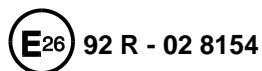
Individual products from serial production shall comply at least with all requirements set out in the Regulation No. 92 R, Amendment 02, Supplement 00 "Uniform provisions concerning the approval of non-original replacement exhaust silencing systems (RESS) for motorcycles, mopeds and three-wheeled vehicles".

The attached test report and drawings shall be a constituent part of this Approval.

Each component of the nonoriginal replacement exhaust silencing system, excluding pipes and fitting accessories, shall be marked with a readable and durable:

- *make (trade name or mark of manufacturer),*
- *commercial name,*
- *approval marking.*

This type of product shall be allotted the following approval marking:



The design and size of the approval marking shall meet the requirements of the Regulation No. 92 R.

Only products which fully comply with the approval documentation may bear the allotted approval mark.

The approval marking on the product must be attached at the place indicated in the approval documentation. Location of the approval marking shall be selected in such way that the marking is clearly readable even when installed on a vehicle.

The product may also be marked with a foreign approval or other marking, provided that the identifiability and readability of the approval marking granted by the Slovenian Type Approval Authority is not affected.

The product shall not bear any markings that may lead to confusion with the officially allotted marking.

Changes of any kind performed on the product shall be subject to special permission by the Slovenian Type Approval Authority.

The Approval will become ineffective when returned or withdrawn. The Approval shall be withdrawn: should the conditions for its granting and existence no longer exist, should the owner of the Approval break his obligations related to the Approval, or when it has been established that the approved product no longer complies with the applicable regulations.

The manufacturer shall regularly inspect the quality of the approved product as well as its conformity with the approval documentation. He shall keep record of this inspection and allow to the surveillance body appointed by the Slovenian Type Approval Authority access to the records. Should any non-conformities be found with respect to the approval documentation, the manufacturer shall immediately inform thereof the Slovenian Type Approval Authority.

Any time, the Slovenian Type Approval Authority may check the correct implementation of the authorizations appointed through this Approval, and for this purpose also select samples for a repeated test. The costs of such checks and conformity of production assessments are charged to the manufacturer.

Any changes regarding the manufacturer's marking, the address or the production plant, or the authorized person appointed through this Approval, shall be forthwith notified to the Slovenian Type Approval Authority.

The rights granted through this Approval shall be untransferrable. The rights of third persons shall not be affected through this Approval.

In the case where the production or sale of the product does not start within one year after the granting of the Approval, or the production or sale is interrupted for a period longer than one year, or such interruption is foreseen, the Slovenian Type Approval Authority shall be immediately notified.

The Slovenian Type Approval Authority shall be notified of the start of production or start of sale, or its restart, within a month's time at the latest.

Non-compliance with above stated provisions may result in withdrawal of the Approval and will be prosecuted.

Legal explanations in relation with this Approval may only be given by the Slovenian Type Approval Authority.

08.03.2021




Tomaž Svetina, M.Sc.Eng.
Head of Vehicle department



KAZALO OPISNE DOKUMENTACIJE E8154
INDEX TO THE INFORMATION PACKAGE E8154

Revision: 00

Homologacijska številka: **E26 92 R 02/00 8154**
Approval number:

Razširitev številka: **00**
Extension number:

Zgodovina homologacije / Opisne dokumentacije:
Type approval / Information package history:

Razširitev / Revizija: Extension / Revision:	Zadeva: Subject:	Datum izdaje: Date of issue:	Skupno št. strani: Total No. of pages:
00/00	Odobritev homologacije Granting of type approval	08.03.2021	31

Poročilo o preskusu: **21-00011-CM-GBM-00**
Test report:

Število strani: **14**
Number of pages:

datum izdaje: **22.02.2021**
date of issue:

datum zadnje spremembe: /
date of latest amendment:

Opisni list/Tehnični opis naprave: /
Information document/Technical description of the device:

Število strani:
Number of pages:

datum izdaje:
date of issue:

datum zadnje spremembe: /
date of latest amendment:

Risba(e)¹:
Drawing(s)¹:

Število strani: **3**
Number of pages:

datum zadnje spremembe: /
date of latest amendment:

Navodila za vgradnjo in uporabo:
Mounting and handling instructions:

Število strani: **13**
Number of pages:

datum zadnje spremembe: /
date of latest amendment:

Ostala dokumentacija:
Other documentation:

Število strani: **1**
Number of pages:



¹ kosovnice, slike, sheme in diagrami / ¹ bill of materials, pictures, schematics and diagrams

**SLOVENIAN TRAFFIC SAFETY AGENCY,
KOTNIKOVA ULICA 19a,
1000 LJUBLJANA,
SLOVENIA**

We, Akrapovič d.d., Malo Hudo 8a. 1295 Ivančna Gorica, Slovenia hereby ask STSA to grant approval against **ECE-R92 02** for the following product:
Exhaust system for Motorcycles:

Type: **M-HAP015**

Version: **M-HAP015 02C (SS / Ca / Ca)**
M-HAP015 02T (SS / Ti / Ca)
M-HAP015 02SS (SS / SS / Ca)
M-HAP015 03C (SS / Ca / Ti)
M-HAP015 03T (SS / Ti / Ti)
M-HAP015 03SS (SS / SS / Ti)
M-HAP015 06T (Ti / Ti / Ti)
M-HAP015 06C (Ti / Ca / Ti)
M-HAP015 05T (Ti / Ti / Ca)
M-HAP015 05C (Ti / Ca / Ca)

Manufacturer: **Akrapovič d.d.**
Malo Hudo 8a
1295 Ivančna Gorica
Slovenia

We declare that we have not applied to any other Approval Authority in the EU Member States for this approval.

We have requested **TÜV SÜD Auto Service GmbH**, to carry out all testing required by the directive and/or regulation that the approval is sought against and to present the entire documentation for the approval.

Yours sincerely,


Akrapovič d.d.
Uroš Rosa, CEO

Date: 12.12.2019



Techn.Bericht Nr. / *Techn. Report No.*: 21-00011-CM-GBM-00

Hersteller / *Manufacturer*: Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type*: M-HAP015

Seite / *Page* 1/7

PRÜFBERICHT TEST REPORT Nr. / no. 21-00011-CM-GBM-00

über die Prüfung einer Nicht-Originalauspuffanlage oder
von Einzelteilen hiervon als Technische Einheit für Kraffräder gemäß
ECE-R 92, Änderungsserie 02
Einheitliche Bedingungen für die Genehmigung von nicht- originalen Austausch-
Schalldämpferanlagen für Kraffräder, Mopeds und Dreiradfahrzeuge

*about a test of a non-original exhaust system or a component
as a separate technical unit for motorcycles according to
ECE-R 92, 02 series of amendments*

*Uniform provisions concerning the approval of non-original replacement exhaust silencing
systems (NORESS) for motorcycles, mopeds and three-wheeled vehicles.*

Genehmigungsstand / Approval status		
<input checked="" type="checkbox"/>	Erteilung einer Typgenehmigung <i>Granting of a type approval</i>	E26 92R-02 8154*00
<input type="checkbox"/>	Nachtrag/Änderung zur Typgenehmigung Nr. <i>Extension/correction to type approval no.</i>	

Gründe der Erweiterung / *Reasons for extension*

Es wird geändert: -
It will be changed: -

Es wird aktualisiert: -
It will be updated: -





Techn.Bericht Nr. / *Techn. Report No.*: 21-00011-CM-GBM-00

Hersteller / *Manufacturer*: Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type*: M-HAP015

Seite / *Page* 2/7

0. Allgemeine Angaben / *General information*

0.1. Fabrikmarke / *Make*: Akrapovic Exhaust System Technology

0.2. Typ / *Type*: M-HAP015

0.2.1 Ausführungen / *Variants*

Ausführungen / <i>Variants</i>	Material / <i>Material</i>		
	Rohre / <i>Tubes</i>	Außenmantel / <i>Sleeve</i>	Endkappe / <i>End cap</i>
M-HAP015 02C	VA / <i>Stainless steel</i>	Karbon / <i>Carbon</i>	Karbon / <i>Carbon</i>
M-HAP015 02T	VA / <i>Stainless steel</i>	Titan / <i>Titanium</i>	Karbon / <i>Carbon</i>
M-HAP015 02SS	VA / <i>Stainless steel</i>	VA / <i>Stainless steel</i>	Karbon / <i>Carbon</i>
M-HAP015 03C	VA / <i>Stainless steel</i>	Karbon / <i>Carbon</i>	Titan / <i>Titanium</i>
M-HAP015 03T	VA / <i>Stainless steel</i>	Titan / <i>Titanium</i>	Titan / <i>Titanium</i>
M-HAP015 03SS	VA / <i>Stainless steel</i>	VA / <i>Stainless steel</i>	Titan / <i>Titanium</i>
M-HAP015 06T	Titan / <i>Titanium</i>	Titan / <i>Titanium</i>	Titan / <i>Titanium</i>
M-HAP015 06C	Titan / <i>Titanium</i>	Karbon / <i>Carbon</i>	Titan / <i>Titanium</i>
M-HAP015 05T	Titan / <i>Titanium</i>	Titan / <i>Titanium</i>	Karbon / <i>Carbon</i>
M-HAP015 05C	Titan / <i>Titanium</i>	Karbon / <i>Carbon</i>	Karbon / <i>Carbon</i>

Die Ausführungen unterscheiden sich in der Verwendung verschiedener Werkstoffe. Der konstruktive Aufbau ist gleich. Das akustische Verhalten ist gleichwertig.

The variants vary, because different materials are used. The basic construction remains the same. The acoustic behaviour is similar.





Techn.Bericht Nr. / *Techn. Report No.:* 21-00011-CM-GBM-00

Hersteller / *Manufacturer:* Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type:* M-HAP015

Seite / *Page* 3/7

- 0.3. Name und Anschrift des Herstellers /
Name and address of manufacturer: Akrapovic d.d.
Malo Hudo 8a
1295 Ivančna Gorica
Slovenia
- 0.4. Name und Anschrift des Beauftragten /
Name and address of authorised agent: entfällt / *not applicable*
- 1.0. Klasse der Fahrzeuge, für die die
Anlage bestimmt ist / *Class of the
vehicles the unit is used for:* L3e
- 1.1. Beschreibung der Fahrzeuge, für
die die Einrichtung bestimmt ist /
*Description of the vehicles
the unit is used for:* siehe Anlage 2 / *notice enclosure 2*

2. Angaben zum Prüfobjekt / *Composition of the separate technical unit*

- 2.1. Art der Technischen Einheit:
Kind of technical unit: Siehe Anlage Technische Dokumentation
See Enclosure, Technical documentation
- 2.2. Ort der Kennzeichnung/
Place of marking: Lasergravur auf Endkappe / Typschild aufgenietet
Engraved by laser / plate fixed with rivets
- 2.3. Zusammenstellung der technischen Einheit /
*Composition of the separate
technical unit:* siehe Anlage 1 / *notice enclosure 1*
- 2.4. Lage und Richtung der Auspuffmündung:
Position and direction of the tail pipe: rechts seitlich nach hinten
at the right side to the rear
- 2.5. Prüfmuster eingegangen am:
Test samples submitted for testing at: 02.09.2020



Techn.Bericht Nr. / *Techn. Report No.:* 21-00011-CM-GBM-00

Hersteller / *Manufacturer:* Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type:* M-HAP015

Seite / *Page* 4/7

3. Prüfprotokoll / *Test report*

Versuchsreihe A / *Tests series A*

3.1. Fahrzeug lfd. Nr. 3) / *Vehicle no. 3)*

3.1.1. Typ / *Type:* KTM IS Duke
3.1.1.1 Variante / *Version / Variant / Version:* A / -
3.1.1.2 Fahrzeugkategorie / *Category:* L3e-A2
3.1.1.3 Handelsbezeichnung / *Model:* KTM 390 Duke

3.1.2. Hersteller / *Manufacturer:* KTM AG

3.1.3. Genehmigungs-Nr. / *Homologation no.:* e1*168/2013*00046*
3.1.3.1 Nachtrag bzw. Erweiterung / *Extension:* 01

3.1.4. Fahrzeugidentifizierungsnummer /
Vehicle identification no.: Prototype

3.1.5. Baujahr / *Year of manufacture:* 2020

3.1.6. km-Stand / *Kilometers:* 1683

3.1.7. Zul. Gesamtgewicht / *total weight:* 375 kg

3.2. Antriebsmaschine / *Engine*

3.2.1. Hersteller / *Manufacturer:* KTM

3.2.2. Typ / *Type:* 938

3.2.3. Hubraum / *Engine capacity:* 373 cm³

3.2.4. Höchstleistung / *engine net power:* 32 kW bei / *at* 9000 min⁻¹

3.2.5. max. Drehmoment / *net torque:* 36 Nm bei / *at* 7000 min⁻¹

3.3. Kraftübertragung / *Transmission*

3.3.1. Art der Kraftübertragung /
Kind of transmission: mechanisch / *mechanical*

3.3.4. Getriebe / *Gearbox:* manuell / *manual*

3.3.5. Übersetzungsverhältnisse /
Transmission ratios:
primär / *primary / sekundär / secondary* 2,667 / 3,0

Höchstgeschwindigkeit / *Top speed:* 160 km/h

Reifen / *Tires:* Pirelli Diabolo Supercorsa
vorne / *front* 110/70 ZR17 54W
hinten / *rear* 150/60 ZR17 66W

3.4. Zusammenbau der Auspuffanlage / *Assembly of the exhaust system*

(Teile lfd. Nr. lt. Anl. 1 /
no. of parts, enclosure 1)

Versuchsreihe A / *Tests series A:* 1)2)3)4)5)



Techn.Bericht Nr. / *Techn. Report No.:* 21-00011-CM-GBM-00

Hersteller / *Manufacturer:* Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type:* M-HAP015

Seite / *Page* 5/7

3.5. Messung der Geräuschwerte / *Acoustic measurements*

- 3.5.1. Hersteller des Messgerätes /
Manufacturer of test equipment: MÜLLER-BBM
- 3.5.2. Typ des Messgerätes /
Type of the test equipment: PAK MK II Configuration
- 3.5.3. Fahrgeräusch, Standgeräusch /
Drive by noise, stationary noise:

nach ECE-R 41.04 /
according ECE-R 41.04
- 3.5.4. Beladungszustand bei der Fahrgeräuschmessung /
Load condition during drive by test: Leergewicht zuzüglich 75 kg Fahrer /
Unloaded weight plus 75 kg driver
- 3.5.5. Abweichung bei Kalibrierung /
Deviation at calibration: < 0.2 dB(A)

3.6. Messung der Leistung / *Power measurement*

- 3.6.1. Messung der Leistungskurve mit Nicht-Originalauspuffanlage /
Testing of max. power with non-original exhaust system:

Die gemessene Nennleistung und die zugehörige Drehzahl liegen im Toleranzbereich von 5% im Vergleich zu den mit der Originalauspuffanlage gemessenen Werten. (siehe Anlage) /
The tested max. power und the engine speed are in the 5% tolerance in comparison with the original exhaust system. (see enclosure)
- 3.6.2. Messung der Höchstgeschwindigkeit mit Nicht-Originalauspuffanlage/
Testing of top speed with non-original exhaust system:

Entfällt, da Fahrzeugklasse: L3e
Not applicable, because vehicle category: L3e

3.7. Konditionierung der Auspuffschalldämpferanlage / *Conditioning*

durch Druckschwingungen / *by pulsation*



Techn.Bericht Nr. / *Techn. Report No.:* 21-00011-CM-GBM-00

Hersteller / *Manufacturer:* Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type:* M-HAP015

Seite / *Page* 6/7

3.8. Messung der Schadstoffemissionen / *Pollution Test*

Auf eine Messung des Abgasverhaltens konnte verzichtet werden, da der original Katalysator unverändert im Abgassystem verbleibt. Eine Verschlechterung des Abgasverhaltens ist nicht zu erwarten.

The Pollution test was not necessary because the original catalytic converter remains without any changes in the exhaust system. A degradation of catalyst efficiency is not expected.

3.9. Ergebnisse / *Test results*

Die Ergebnisse der Prüfungen hinsichtlich / *The results of*

3.9.1. Geräusche / *Sound testing*

3.9.2. Leistung / *Power measurement*

3.9.3. Höchstgeschwindigkeit / *Top speed*

3.9.4. Abgasverhalten / *Pollution test*

sind der als Anlage 3 und 4 beigefügten Tabellen zu entnehmen /
are attached in the enclosure.

Aufgrund der Messung mit dem/n o.g. Fahrzeug/en können auch die in Anlage 2 aufgeführten Kraffräder die die gleiche Serien- Auspuffanlage besitzen und gleiche bzw. geringere Motorleistung haben, mit in den Verwendungsbereich aufgenommen werden/
All motorcycles with the same serial exhaust system and same or less performance mentioned in enclosure 2, can be taken into the field of application due to the measurement with the above named motorcycle/s.

3.9.5. Die beschriebene Nicht-Originalauspuffanlage / Technische Einheit darf an den in der Anlage 2 aufgeführten Kraftfahrzeugen unter den dort genannten Bedingungen verwendet werden. /

The described non-original exhaust system / technical unit is suitable for an application on the vehicles listed in enclosure 2.

3.9.6. Die allgemeinen Spezifikationen gemäß Punkt 6.1 der ECE-R 92 wurden überprüft und werden durch die Nicht-Originalauspuffanlage / Technische Einheit erfüllt. /

The general specifications concerning item 6.1 of the Directive ECE-R 92 were checked and fulfilled.

4. Anlagen / *Enclosures*

Anlage 1, Teile der Nicht-Originalauspuffanlage

Enclosure 1, Composition of the non original exhaust system

Anlage 2, Verwendungsbereich

Enclosure 2, Field of application

Anlage 3, Ergebnis der Prüfungen

Enclosure 3, Test results

Anlage, Leistungskurve

Enclosure, Performance diagram

Anlage, Protokoll Geräuschmessung

Enclosure, protocol noise test



Techn.Bericht Nr. / *Techn. Report No.*: 21-00011-CM-GBM-00

Hersteller / *Manufacturer*: Akrapovic, Malo Hudo 8a, 1295 Ivančna Gorica
Slovenia

Typ / *Type*: M-HAP015

Seite / *Page* 7/7

Anlage <i>Enclosure</i>	Zeichnung Nr. <i>Drawing no.</i>	Datum <i>Date</i>	Seiten <i>Pages</i>
Zeichnung Schalldämpfer <i>Drawing silencer</i>	M-HAP015	07.07.2020	1
Stückliste <i>Part list</i>	M-HAP015	-	1
Zusammenstellungszeichnung <i>Assembly drawing</i>	KTM DUKE 125 / 250 / 390 KTM RC 125 / 250 / 390	-	1
Montageanleitung <i>Installation instructions</i>	KTM DUKE 125 / 250 / 390 KTM RC 125 / 250 / 390	09/2020	12
ASEP Bestätigung <i>Statement of compliance ASEP</i>	-	21.09.2020	1

5. Schlussbescheinigung / *Summary*

Der angegebene Beschreibungsbogen und der darin beschriebene Typ entsprechen der genannten Prüfgrundlage. Der ungünstigste Fall wurde entsprechend Prozessbeschreibung „Erstellung von Gutachten“ bestimmt.

Der Prüfbericht darf nur vom Auftraggeber und nur in vollem Wortlaut vervielfältigt und weitergegeben werden. Eine auszugsweise Vervielfältigung und Veröffentlichung des Prüfberichtes ist nur nach schriftlicher Genehmigung des Prüflaboratoriums zulässig
The information folder and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

München, 22.02.2021



Dipl.-Ing. (FH) Max Höhler
Prüfingenieur / *The Expert*



T:\KRAD KOMPONENTEN\Auspuffanlage\Akrapovic\2021\KTM 390_250_125 Duke (M-HAP015)\ECE\M-HAP015_SLO_ECE.docx

**ANLAGE 1
ENCLOSURE 1**

zum Prüfbericht Nr. / to test report no.

Typ /Type:

Hersteller / Manufacturer:

21-00011-CM-GBM-00

M-HAP015

Akrapovic, Malo Hudo 8a
1295 Ivancna Gorica, Slovenia

**Teile der Nicht-Originalauspuffanlage + Originalteile/
Composition of the original exhaust system + original parts**

Seite / Page 1/1

Lfd. Nr. /	Einzelteile, Abmessungen in mm /	Abmessungen des Teiles in mm bzw. Originalteil / Ersatzteil /	Teilenummer bzw. Genehmigungsnummer /
No.	Components parts, dimensions in mm	Dimensions of the part in mm or original part / replacement part	Part no. or homologation no.
1)	Krümmerrrohr / header pipe	Originalteil / original parts	-
2)	Katalysator / catalytic converter	Originalteil / original parts	-
3)	Vorschalldämpfer / Pre silencer	Originalteil / original parts	-
4)	Verbindungsrohr / link pipe	-	L-KTMSO23
5)	Schalldämpfer / silencer (Austrittsrohr / outlet pipe Ø 32)	hexagonal / hexagonal 94,9 x 127,9 Länge ohne Endkappen / length without end caps 250	M-HAP015 e26*08154*G E26 92R-02 8154

**ANLAGE 2
ENCLOSURE 2**

zum Prüfbericht Nr. / to test report no.

Typ / Type:

Hersteller / Manufacturer:

21-00011-CM-GBM-00

M-HAP015

Akrapovic, Malo Hudo 8a

1295 Ivancna Gorica, Slovenia

Verwendungsbereich (Fahrzeugdaten) / Field of application

Seite / Page 1/1

Die Fahrzeuge erfüllen - bezugnehmend auf ihre Fahrzeugtyp Genehmigung - die Umweltanforderungsstufen: Euro (4/5)

The vehicles fulfil - regarding their Whole Vehicle Type Approval (WVTA) - the environmental steps: Euro (4/5)

Lfd. Nr.	Hersteller	Fabrikmarke	Handelsbezeichnung	Fahrzeugtyp ab Genehmigung Nr.	Var. Vers.	Motortyp	Hubraum in cm3	Nennleistung kW/min-1	Sonstige bestimmende Merkmale	Anordnung entspr. Anl. 1 lfd. Nr.
1)	KTM AG	KTM	Duke 125	Vehicle type beginning with no. of homologation KTM IS Duke e1*168/2013*00047*	alle	Engine type 4 Stroke 935	Engine capacity in cm3 125	max. engine power kW/min-1 11/9500	Additional remarks mit Kat.*) / with cat.	Composition reg. enclosure no. 1 1)2)3)4)5)
2)			Duke 250	KTM IS Duke	all	937	249	23/9000		
3)			Duke 390	e1*168/2013*00046*		938	373	32/9000		

*) Die serienmäßigen Katalysatoren bleiben unverändert im Abgassystem. Eine Verschlechterung des Abgasverhaltens ist nicht zu erwarten. / The original catalytic converter remains in the exhaust system. A degradation of catalyst efficiency is not expected.



ANLAGE 3 ENCLOSURE 3

zum Prüfbericht Nr. / to test report no.

Typ / Type:

Hersteller / Manufacturer:

21-00011-CM-GBM-00
M-HAP015

Akrapovic d.d.,
1295 Ivancna Gorica, Slovenia

Ergebnis der Prüfungen / Test results

Seite / Page 1/1

Lfd.Nr.	Leistung		Vmax	Vmax	Fahrgeräusche in dB(A) / Sound levels driving vehicle in dB(A)				Standgeräusche in dB(A) / Sound levels stationary vehicle in dB(A)							
	Serie kW/min ⁻¹	Austausch kW/min ⁻¹			Leistung in gear measured ratio	Grenzwert in gear measured ratio	Serie gemessen L _{urban}	Austausch gemessen L _{urban}	bei km/h	bei km/h	lt. Fzg. BE	Serie gemessen /	Austausch gemessen bei min ⁻¹	at min ⁻¹		
No. of vehicle	Engine power original kW/min ⁻¹	Engine power non original kW/min ⁻¹	Vmax original km/h	Vmax non original km/h	Limit Value **)	measured in gear ratio	measured in gear ratio	Original measured L _{urban}	Original measured L _{urban}	at km/h	at km/h	Vehicle type hom.	Original measured	Non original measured	at min ⁻¹	
3) A*	32/9000	32/9000	-	-	77	3	75	74	75	50	50	85	86	85	85	4500

*) Versuchsreihe / test series

***) Grenzwert der Richtlinienfassung, die bei Erteilung der Fahrzeuggenehmigung Gültigkeit hatte /
Limit value of directive which was valid by vehicle type homologation

1. Vehicle

1.1 Manufacturer: KTM
 1.2 Vehicle Ident. Number: VBKJPJ408KC213617
 1.3 Commercial name / Type: 390 Duke
 1.4 Type: ---
 1.5 Variant: ---
 1.6 Version: ---
 1.7 Class: L3e-A2
 1.8 Type approval number: without (Prototype)
 1.9 Vehicle kerb weight (m_{kerb}) [kg]: 162,0
 1.10 Mass of the vehicle in running order (m_{ro}) [kg]: 237,0
 1.11 Vehicle test mass (m_t) [kg]: 239,0
 1.12 Technically permissible max. laden mass (M) [kg]: ---
 1.13 Power to mass ratio index (PMR): 135,0
 1.14 Vehicle length [m]: 2,0
 1.15 Milage [km]: 1683

2. Engine

2.1 Manufacturer: KTM
 2.2 Engine code: 9-938*10692*
 2.3 Cycles: four stroke two stroke n.a.
 2.4 Number and arrangement of cylinders: 1 / Single
 2.5 Working principle: positive ignition compression ignition electric hybrid
 2.6 Rated power [$\text{kW} / \text{min}^{-1}$]: 32 / 9000
 2.7 Idle engine speed [min^{-1}]: 1680
 2.8 Cylinder capacity [cm^3]: 373

3. Transmission

3.1 Type: manual gearbox automatic gearbox Type: without
 3.2 No. of gears: 6
 3.3 Ratio (Prime : Secondary) --- : ---
 3.4 Driving mode(s): without



4. **Equipment**

4.1	Pre Catalyst(s) Make / type (left/right):	---	/	---	/	---
4.2	Catalyst(s) Make / type (left/right):	---	/	---	/	---
4.5	Front exhaust silencer(s) Make / type (left/right):	KTM	/	---	/	KTMISV04
4.6	Middle exhaust silencer(s) Make / type (left/right):	---	/	---	/	---
4.7	Rear exhaust silencer(s) Make / type (left/right):	Akrapovic	/	---	/	M-HAP015
4.8	Tail pipe(s) Make / type (left/right):	Akrapovic	/	---	/	D=32mm
4.9	Exhaust Flap(s) Make / type (left/right):	---	/	---	/	---
4.13	Tyres					
	Manufacturer:	Pirelli		Pirelli		
	Type:	Diablo Supercorsa		Diablo Supercorsa		
	Size:	110/70 ZR17 54W		150/60 ZR17 66W		
	Tyre pressure [bar]:	---		---		
	Tyre tread depth [mm]:	> 4		> 4		

5. **Measurements**

5.1 Conditions

Passby Parameter	Driving conditions	i	i+1	Calculation of the acceleration/factors
Reference acceleration $a_{wot\ ref}$ [m/s ²]:	Gear:	3*	4	$a_{wot\ ref} = 3.33 * \log(PMR) - 4.16$
-10% Reference acc. $a_{wot\ ref\ min}$ [m/s ²]:	test acceleration $a_{wot\ test}$ [m/s ²]:	3,34	---	$k = n.a.$
+10% Reference acc. $a_{wot\ ref\ max}$ [m/s ²]:	aver. vehicle velocity when ref. point at AA'	39,7	---	$k_p = (1 - (a_{urban}/a_{wot\ test}))$
Target acceleration a_{urban} [m/s ²]:	aver. vehicle velocity when ref. point at PP'	49,3	---	$a_{wot\ i} = ((v_{BB}/3.6)^2 - (v_{AA'}/3.6)^2) / (2 * (20 + i))$
Gear weighting factor k_g :	aver. vehicle velocity when ref. point at BB'	59,0	---	$a_{wot\ i+1} = n.a.$
Partial power factor k_p :	Operating mode:	without		$a_{urban} = 1.28 * \log(PMR) - 1.19$
Test speed v_{test} at PP' (± 1) [km/h]:	Gearbox:	Locked		Evaluation $a_{wot\ test}$: AA'-BB'

5.2 Measurement results pass by noise

Gear used	Run	Mode	acc. point ⁽¹⁾ [m]	A-A'		P-P'		B-B'		$a_{wot\ test}$ [m/s ²]	Sound level L ⁽²⁾		L ⁽³⁾	
				v [km/h]	n [rpm]	v [km/h]	n [rpm]	v [km/h]	n [rpm]		left [dB(A)]	right [dB(A)]	li [dB(A)]	re [dB(A)]
3	2	wot ₍₃₎	0,0	39,9	4066	49,4	4951	59,0	5961	3,31	77,1	76,6	77,2	76,7
	3			39,8	4050	49,4	4966	59,1	5964	3,35	77,2	76,6		
	7			39,4	4019	49,2	4911	58,9	5957	3,36	77,4	76,8		
	11	crs ₍₃₎		49,6	5017	49,3	4971	49,2	4921		70,5	71,9	70,5	71,5
	14			49,0	4936	49,1	4925	49,4	4978		70,8	71,1		
	15			49,8	5003	49,4	5000	49,6	4995		70,2	71,6		
---	---	---	---	---	---	---	---	---	---	---	---	---	---	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	

1) Acceleration point according Line A-A'; 2) values reduced by 1 dB(A); Numbers written in italics a corrected acc. to Annex3, Pt. 2.1; 3) Intermediate Results of each side of the vehicle

$[L_{wot\ rep} = L_{wot\ (i+1)} + k * (L_{wot\ (i)} - L_{wot\ (i+1)})]$; [In the case of a single gear ratio test the values are the test result of each test; PMR > 25]
 $[L_{crs\ rep} = L_{crs\ (i+1)} + k * (L_{crs\ (i)} - L_{crs\ (i+1)})]$; [In the case of a single gear ratio test the values are the test result of each test; PMR > 25]

5.3 Results

	Gear		L _{rep}	L _{wot\ max\ limit}	Test result L _{urban}
	i [dB(A)]	i+1 [dB(A)]			
L _{wot}	77,2	---	77,2	82,0	74,1
L _{crs}	71,5	---			

Calculation L _{urban} (PMR > 25)
$[L_{urban} = L_{wot\ rep} - k_p * (L_{wot\ rep} - L_{crs\ rep})]$
$[L_{urban} = 77,2 - 0,54 * (77,2 - 71,5)]$



5.4 Limits

Category	Power-to-mass ratio index (PMR)	Limit value for L _{urban} [dB(A)]	applicable Limit value
First category	PMR ≤ 25	73	
Second category	25 < PMR ≤ 50	74	
Third category	PMR > 50	77 ^(a)	X

(a) For motorcycles tested in second gear only in Annex 3, the limit value is increased by 1dB(A) until the date in Paragraph 12.7. Data for affected vehicles shall be studied, and discussions shall be made in case of further extension.

5.5 Sound level of stationary vehicle

Operation mode: without

Measuring results	left	right
	[dB(A)]	[dB(A)]
1 st Run	---	84,5
2 nd Run	---	84,7
3 rd Run	---	84,5
4 th Run	---	---
average Value	---	84,6

Engine speed [rpm]	Target engine speed	
4500	---	n = 75% S (S ≤ 5000 min ⁻¹)
	X	n = 50% S (S > 5000 min ⁻¹)

Result [dB(A)] **85**

5.5.1 Sound level of stationary vehicle in different operation modes

Operation mode	Result [dB(A)]
---	---
---	---
---	---
---	---
---	---

Engine speed [rpm]	Target engine speed	
---	---	n = 75% S (S ≤ 5000 min ⁻¹)
	---	n = 50% S (S > 5000 min ⁻¹)

6. **Weather conditions**

Air temperature [°C]:	21,7
Surface temperature [°C]:	39,6
Air pressure [mbar]:	997,4

Air humidity [%]:	55,6
Wind speed [m/s]:	1,3
Wind direction [°]:	142,1

7. **General Requirements**

Ambient noise level	
before Measurement [dB(A)]:	40,3
after Measurement [dB(A)]:	40,3

Calibration level (Target) [dB(A)]:	94,0
Calibration level Micro 1 [dB(A)]:	94,0
Calibration level Micro 2 [dB(A)]:	94,0

8. **Test Standard:** UN ECE-R 41.04, Supp. 7, Annex 3
9. **Expert:** Wibmer Chr.
10. **Date / place of test:** 02.09.2020 / Akrapovic d.d., Prečna (SI)
10. **Date of issue:** 05.10.2020
11. **Remarks:** *) Measurements performed in the same procedure as determined during the type approval process
 Akrapovic slip on system
 Insert D=32 mm



Partial exhaust system / Slip-ON line / EC / ECE Type approval

KTM DUKE 125 / 250 / 390

KTM RC 125 / 250 / 390

S-KTM3SO5-HAPC

